

PLUS CD-ROM Photo Illuminator (full version), images, PDFs and more...

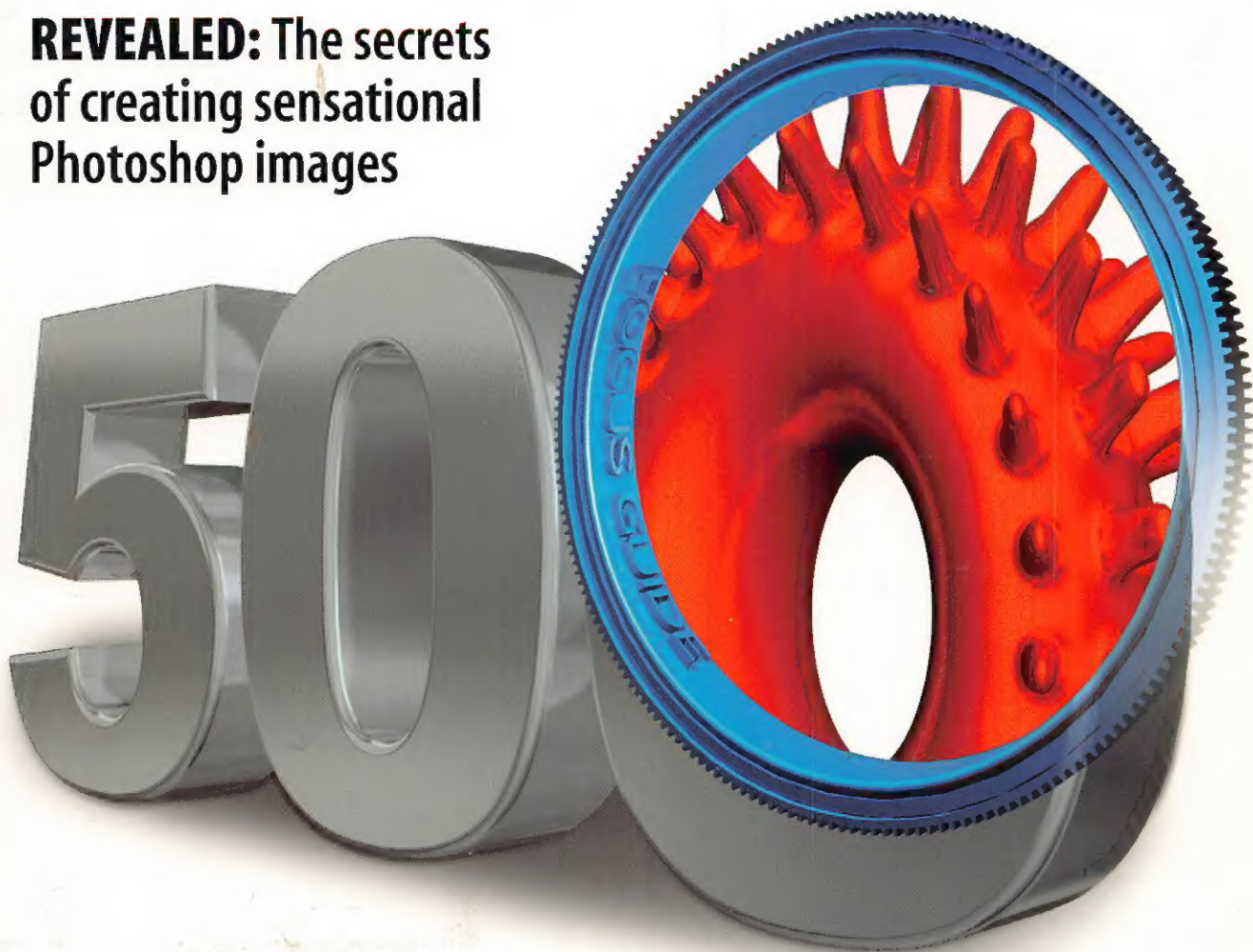
Adobe Photoshop

500 Killer Tips



FocusGuide
From the makers of **Computer Arts**

REVEALED: The secrets
of creating sensational
Photoshop images



132 pages of easy-to-follow tutorials and expert advice
to help develop your Adobe Photoshop skills



We tip generously...

Learn a new Photoshop technique for every day of the year, and then some. Our fab 500 will push your skills to the limit

This month's Adobe Photoshop Focus Guide is jam-packed with 500 killer tips, every one of which will add another string to your image editing bow. We hope this monster collection will be a useful resource to all you busy Photoshoppers out there – even if you only have five minutes to spare, it will still provide some valuable knowledge to help you complete your creative projects with style and efficiency.

Our first chapter takes a wide-ranging view of the program, offering dozens of handy hints for improving your workflow and making your Photoshop sessions run smoothly. We then move on to four specialist chapters that will help those interested digital photography, design, illustration and composition work. Each subject is tackled in detail, with a multitude of bite-sized gems to help you become a Photoshop 'power user' faster than you ever thought possible.

Our final chapter deals with the all-important process of distributing your finished masterpieces, regardless of whether you opt for print, the web or CD as your medium of choice. Our expert advice will ensure that your results are everything you hoped for, helping you to avoid many of the common pitfalls.

This month's CD is brimming with resources to improve your Photoshop skills. First up is Ashampoo's Photo Illuminator 1.53, a full product that will help you organise, preview and distribute your digital images without fuss. There's also 100 minutes of video tutorials, 20 stock images, sample book PDFs and much more. Enjoy!





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Finding your way

Our handy icons hold the key to a wealth of additional information. Here's what they all mean...

It's been a tough job cramming 500 Photoshop tips into this Focus Guide, and to help you find your way around quickly, many of the hints and shortcuts are highlighted by the special icons that occupy the margins on each page.

As you leaf through the pages, you'll find a range of eye-catching symbols, each of which indicates an extra nugget of knowledge. The icons enable you to identify exactly what kind of information you're dealing with – for a guide to icon

categories, see below. These handy hints and tips are often relevant to other information on that page, and will help you develop your Photoshop skills that little bit faster.

Our writers are always experienced Photoshop experts who regularly contribute to our sister magazines, such as *Computer Arts*, *Computer Arts Projects* and *Digital Camera Magazine*. So you can rest assured that all the information they provide is both authoritative, and thoroughly tried and tested.



On your CD-ROM

Tutorial files, trial software and more besides is included on your CD-ROM. Every now and then we remind you of this by flagging-up the disc icon and listing what's on it. Handy, eh?



Take note

You'll find a number of these nuggets of knowledge scattered throughout the Guide. They're crammed with useful information that complements the main text perfectly.



Top tips

This indicates an expert tip. Anything sheltered beneath this icon is guaranteed to reveal a useful tip, or advice about Photoshop's range of tools, options and features.



Watch out!

The 'skull and crossbones' sign means proceed with caution. You'll find some important points outlined below this icon, which you should certainly take seriously.



Further information

We'd like to tell you absolutely everything, but there's just not enough space. Instead we refer you to other useful resources, such as websites and specialist books for further reading.



Links

When we refer to a website, we may pull out the web address in the sidebar to make it easier for you to read and remember.



Shortcuts

Carrying out common tasks again and again can get a little tedious. Our handy shortcuts show you how to carry out these tasks with a few deft key-presses, saving you lots of time and effort.

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Chapter 1

TIPS AND TRICKS TO EASE YOUR WORKFLOW

In this chapter...

- ☐ *Learn the best ways to save your files safely*
- ☐ *Find your way around the finer points of Photoshop's interface*
- ☐ *Customise Photoshop preferences, keyboard shortcuts and palettes to suit your own style*
- ☐ *Discover some new tricks using the selection tools*
- ☐ *Find out how colours are made up*

Before we start creating Photoshop projects, we'll look at some shortcuts that will help your working day to run smoothly. You'll wonder how you ever managed without them!

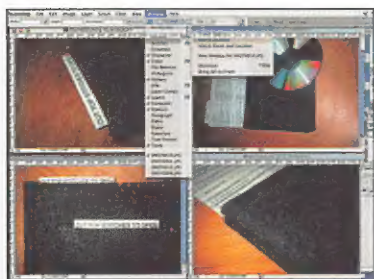
Every workman should know their way around the tools of their trade. The difference between an amateur and a professional isn't about knowing how to hold a spade, a pen or a needle, but knowing the right way to use it; the angle that enables you to work fastest, the rhythm that's most in tune with the way you work, the approach that's most suitable to the job in hand. The same can be said of digital artists, when it comes to one of their most commonly-used tools – Photoshop.

We all like to think we know our way around Photoshop, but this Focus Guide should show you just how much more there is to discover.

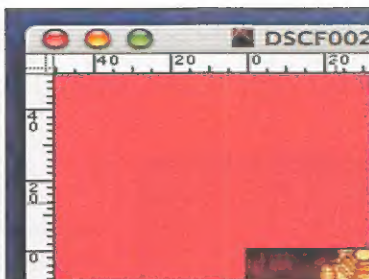
Even given the scope of 500 tips, there still isn't enough space here to cover every hidden function, every keyboard shortcut or camouflaged button. But this book should at least start you on your way to exploring the hidden depths of everyone's favourite design tool.

File under 'Useful'

When was the last time you really thought about the process involved in starting a new file? In this chapter we'll be looking at the foundation for any new project – the image file that's your blank canvas. RGB and CMYK, what's the difference? How does resolution relate to image size?



Page 12 See your work more clearly by tiling images with just one click



Page 14 Customise your workspace – you can even re-colour the canvas



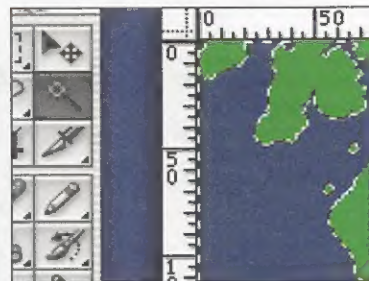
Page 19 Use Photoshop to identify 'out-of-gamut', unprintable colours



Page 21 Use the docking well to store palettes for easy accessibility



Page 24 Feather your copied selections to give them a soft, blendable edge



Page 23 Quickly select flat colours by using the Magic Wand in a particular way

How are colours mixed, and are there particular settings we need to consider, depending on how the project will be output? What are the best ways to make safe back-up files of work in progress?

Interface-lift

We'll also be taking a look at ways of modifying and customising the Photoshop interface. Palettes can be repositioned and saved in sets, as can keyboard shortcuts, so that each user has their own set-up. Other areas of the interface contain the kind of details that we bypass every day, such as extra buttons on the toolbar and information displays

on the image window. Of course, most important of all are the images that you're working on – we'll show you various ways of viewing your work and moving between files.

Onwards and upwards

Finally, we'll start looking at some everyday working techniques, and shortcuts for operations such as cutting and pasting, zooming, transforming and creating selections. Many more sophisticated techniques will be covered in our later, more specific chapters, but to start with we'll include a good selection of tips that will prove useful whatever you're doing with Photoshop.

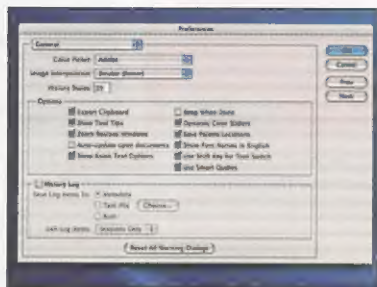
Some useful preference settings

Make use of Photoshop's many preference settings to get it working just how you want

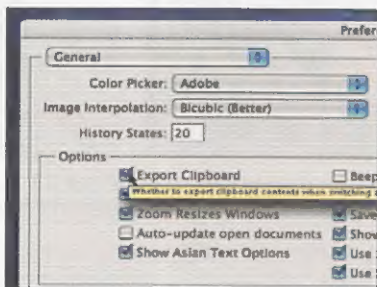


CS File Browser preferences

If you're using Photoshop CS, you'll find a set of File Browser preferences. Most usefully, you can change the Custom Thumbnail Size and specify the number of recently used folders in the Location pop-up. To speed up the File Browser's general response, try unticking the High Quality Previews box.



1 Photoshop preferences are used to set up the general workings of Photoshop, so shouldn't need to be changed on a project-to-project basis. However, as you become more familiar with Photoshop you'll want to set it up to suit the way you work. Select **Edit > Preferences > General** (on a Mac, it's found in the Photoshop menu to the left of 'File') to open the General preferences dialogue.

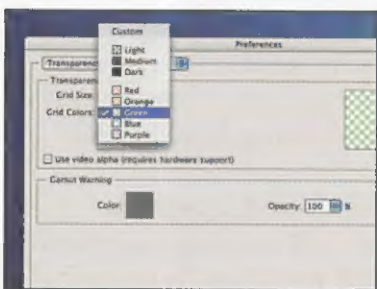


2 You can leave Image Interpolation, the default setting used in the Image Adjustments window when resizing images, at the default Bicubic (Better) unless you're doing 'Pixel Art' drawings, when you should set it to Nearest Neighbor (Faster). Most of the other options here are self-explanatory – Export Clipboard enables you to save copied images to the memory cache.

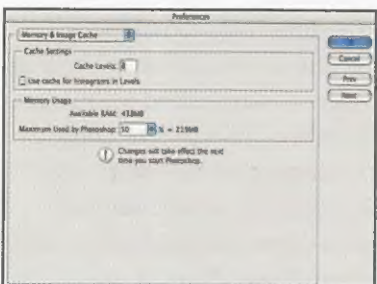


Keyboard shortcuts to preferences

Access the Preferences window quickly by pressing **[Control]+[K]** (on a Mac, **[Command]+[K]**). To reset all the preferences to their original Photoshop defaults, press **[Control]+[Alt]+[Shift]** (that's **[Command]+[Option]+[Shift]** on a Mac) on start-up. Also note that, when the Preferences window is open, if you hold down **[Alt/Option]** the Cancel button will become a Reset button.



3 Under the File Handling preferences, the only really useful setting is 'Recent files list contains:', where you can set the number of files 'remembered' (see page 11). In Displays and Cursors, the Painting Cursors and Others Cursors designs can be reset – this doesn't affect the tools' response. Similarly, the Transparency settings in Transparency and Gamut are a matter of personal taste.

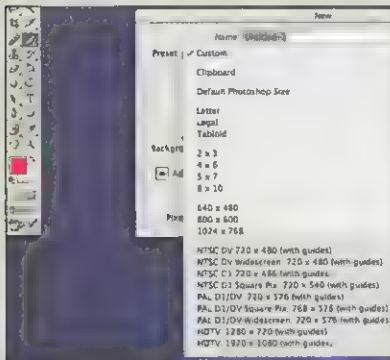


4 In the Units & Rulers dialogue you can set the default units used to measure or show sizes or distances. The Guides, Grids & Slices preferences affect the look of these various indicators, without changing how they work. Finally, Plug-Ins & Scratch Disks and Memory & Image Cache shouldn't be touched at all, unless Photoshop starts slowing down considerably, or you have other file problems.

Setting up files for 'transparent' images

If you're creating a 'transparent' GIF (i.e. non-painted areas of the image are see-through when displayed on a web page), when you do File > New to create your file, set Background Contents as Transparent. Then create the file and, finally, go to File > Save for Web, select GIF and tick the Transparency box.

File dimensions for special jobs – the quick way



Whether you need to create a file for printing on A4 paper, or for insertion as a still in a video, you'll be happy to know Adobe has anticipated this. Rather than measuring an A4 page with a ruler, then entering the dimensions (297x210mm) manually, simply select File > New, then, in the pop-up click Preset > Custom to reveal a whole list of preset dimensions. If you're creating a still for a video shot on a UK DV camera, you probably need PAL D1/DV, 720 x 576 (if it was shot on a US camera, you'll need the NTSC version). Double-check the dimensions in your video-editing application first.

Get Photoshop answers with Google searches

There are certain things to bear in mind if you're using Google to search for Photoshop tips. Use as few words as possible to start with, and concentrate on unique words that are specific to your problem. Also use "quotation marks" to search for whole phrases.



Track down your most recently-used files fast

You may be trying to track down a file that you used in Photoshop only yesterday, but you can't for the life of you remember where you saved it. Not to worry. Instead of selecting File > Open and browsing randomly, select File > Open Recent and you should find it listed there. To get Photoshop to 'remember' a larger number of recent files, go to Preferences > File Handling and set 'Recent files list contains:' to a higher number. Beware though, that setting this number too high will put unnecessary strain on Photoshop's Memory Cache – Adobe's default setting of 10 is probably the most you'll need. Alternatively, use the 'find file' feature appropriate to your computer's operating system.



Greyed-out

If you've selected File > Open to open a file but find that it's 'greyed out' – i.e. Photoshop won't let you select it – check the file type. Photoshop can comfortably open PDFs, PICTs and even Illustrator files. If you created the file in another application, what Save or Export settings did you use that might be causing the problem?



Help yourself

If you've got a specific Photoshop query, try the obvious place first before you rush out to buy every Photoshop book under the sun. Open Photoshop, then select Help > Photoshop Help. The pop-up features a handy Search feature, or you might find that your question is answered in one of the Tutorials listed.

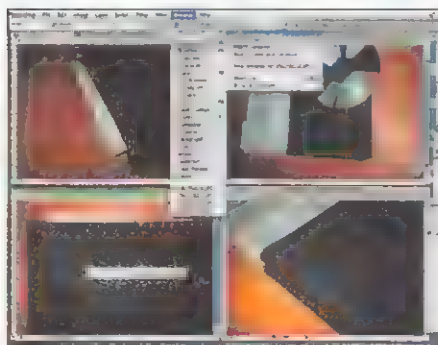
How to arrange multiple images neatly in a flash



Fast File Browser

Photoshop CS's unique File Browser feature allows you fast access to folders of images, but there's more than one way to access it. You can select **File > Browse** if you like using menus, but there's a faster way; on the right of the options bar is a File Browser button which you can use to toggle the window open and closed.

How many times have you found that you needed to have several images open at the same time in Photoshop, but then had to spend most of your working day dragging



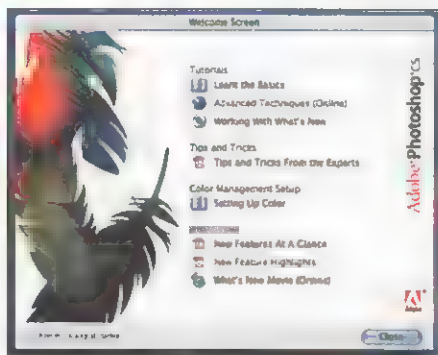
Working on more than one image? Selecting **Window > Arrange > Tile** arranges them neatly

them all over the screen, trying to find a layout that works? You might be sampling colours from one image to use in another, or making a selection with a Marquee tool and then dragging this to drop it into a second image. Whatever you're trying to do, it can be frustrating, fiddly work if you can't see or get to the images properly. But there is a solution. Simply open your files as usual, then select **Window > Arrange > Tile**. All of your open files will tile across the screen, so you can see them at the same time. You can neatly stack them again by choosing **Cascade**.



Adobe online

There are few parts of the Photoshop interface design that exist without good reason. If you look at the top of the Toolbar, just above the tools is the Adobe Photoshop logo: a feather. This is actually a button that automatically directs you to the Adobe Photoshop site (www.adobe.com/products/photoshop/main.html) when you're online.



Call up the Photoshop Welcome screen

In you rushed to start working with Photoshop you probably skipped the Welcome screen on first launching. When you open the program subsequently, you won't see it. If you want to call it up, select **Help > Welcome Screen** – now you can see all that useful supporting material.

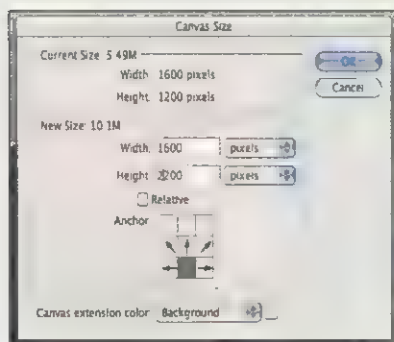
Quickly compare images by matching zoom and location values

Sometimes you may have more than one image open, but you want to be able to look at the same area of each one. For example, you may be comparing three images that are different versions of the same original, but which have been saved using different JPEG settings, so looking at exactly the same part of each one will allow you to compare the quality of the images. Simply select **Window > Arrange**, and then choose **Zoom** (this sets each image window to the same zoom value), **Location** (this navigates to the same location in each window, or **Zoom and Location** (most usefully, this option performs both of the above functions in one go).

Making more working room in your image

You may start work on an image and realise that you need space outside the canvas for other elements.

Select **Image > Canvas Size**, increase the values and set up the Anchor for the original image. In this example, the image is set along the bottom of the canvas, with space above.



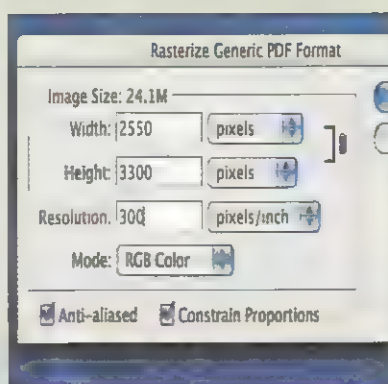
Using a Clipboard image's dimensions to create a new file

Whenever you use the Copy or Cut functions in Photoshop, the selection that you copy or cut is 'remembered' in an area of Photoshop's memory which is known as the Clipboard. Even if you cut the head off your uncle and then paste it on to a donkey, the head will remain stored in the Clipboard until you cut or copy another selection, which will overwrite it. To start a new file based on the dimensions of the image in the Clipboard, simply perform the copy or cut, then select **File > New**. Alternatively, change the Preset to Custom, so that the file dimensions aren't based on the dimensions of the Clipboard image, but on your own input values.

Create new files with dimensions matching open images

If you have an image open, and want to create a new file with the same settings, select **File > New** and, instead of entering dimensions by hand, go to **Window > Documents** and select the file name (in CS, you'll see the image to select at the bottom of the Window menu).

Opening and using PDFs in Photoshop



PDFs are typically used to distribute files that contain a lot of text. You literally 'read' them, rather than editing them, but we can break the rules in Photoshop. Select **File > Open** and choose your PDF. On clicking OK, you'll be asked to **Rasterize PDF Format**, so enter **72 pixels/inch** if you want to re-edit it as a web image, or **300 pixels/inch** for print. Leave all other settings untouched, then hit OK. If it's a multi-page file, you'll also need to select (and therefore edit) just one page at a time. You'll see the page opens with a largely transparent background, so, in the Layers palette, create a new layer, fill it with white, and stack it underneath.



Find PDFs quickly

If you're trying to open a PDF that shares a folder with many JPEGs, GIFs and other Photoshop-readable images, don't select **File > Open** – it will take you too long to see the file. Instead, select **File > Import > PDF Image** and you'll notice that all other file types are greyed-out in the Browse pop-up, so the PDFs stand out.



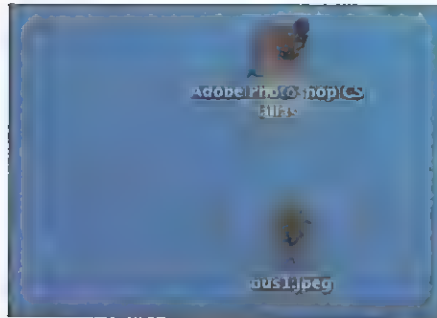
Searching for images

Unless you have CS and use the File Browser > Search feature, there's no 'search' option for finding files in Photoshop. Both Windows and Mac users can search for files by name, or list all images – first view a folder in list form (not as icons) then click the header of the Kind column at the top of the folder window.



Image > Duplicate

If you've been working on a file and would like to save your progress so far, you can do so by creating a duplicate. Do Image > Duplicate and rename the file if necessary. The new file will then open in Photoshop, so make sure you save it before closing it and continuing to work on your original.

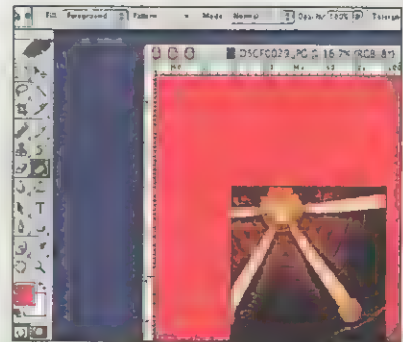


Open any image file and start Photoshop simultaneously

Opening a PSD file automatically launches Photoshop, but other files (JPEGs, GIFs and so on) might open in different applications. To open any image in Photoshop, drag and drop the file's icon on to a Shortcut (alias) of the Photoshop Startup file, or right-click ([Control] click on a Mac) and select Open With > Photoshop.

Shift-click Paint Bucket to re-colour your work canvas

The work canvas is the grey margin around an image, and can be seen if the image is displayed smaller than the window. To change the colour of the canvas, select the Paintbucket Tool, then select a new foreground colour and [Shift]-click on the canvas.

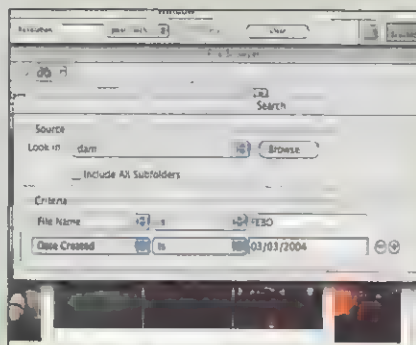


The image status bar

The status bar at the bottom of your opened image can tell you all kinds of information. Click the arrowhead button and a menu appears, allowing you to read Document Sizes, Profile or Dimensions, Scratch Sizes, Efficiency, Time and Current Tool. To the left of that readout, you can also see and change the Zoom value.

Using the Photoshop CS File Browser to track down files

It's all very well planning a logical file storage system, and keeping your holiday photos in the Holiday folder and your artwork in the Artwork

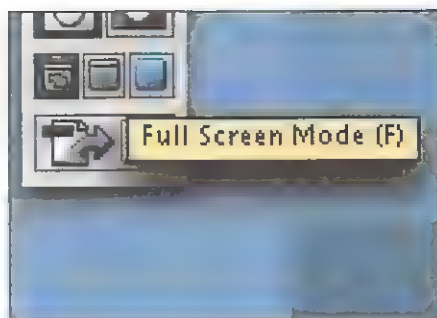
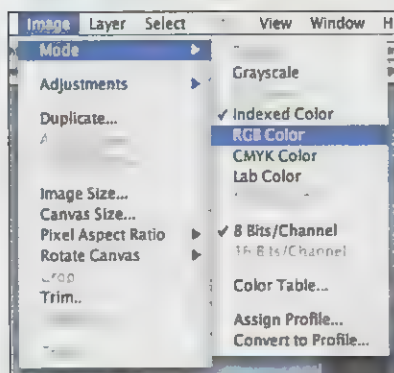


Use the File Browser's unique Search feature to track down image files

folder, but files do have a habit of going astray (and no, it's not usually something that you can blame on the computer!). But, if you have Photoshop CS, your files won't be lost for long. Adobe has not only included the File Browser navigation system in this version, it has also built in a Search feature. In the File Browser, click on the binoculars icon and the Search pop-up appears. You can choose to look in the current File Browser folder or browse for a different folder (or browse your entire hard drive). Then use the various criteria to search for your file. To search according to more than one criteria, click the + button to the right.

Locked features? Check your Image Mode

If you find that certain menu options are locked or 'greyed-out', select **Image > Mode** to check the colour mode of your image. This shows you the system used to create colour in your image – try changing it to RGB if it's set to something else.



Try different screen modes for large-scale work

If you're fed up with small image windows in the middle of your screen, use the screen mode buttons to change the view. At the bottom of the Toolbar there are three buttons: Standard Screen Mode, Full Screen Mode with Menu Bar and Full Screen Mode. Switch between them to see how the window resizes.



Targeted zooms

You may be used to simply pointing the Zoom Tool at your image and clicking blindly, but don't forget that wherever you click, that's the centre of the area you're zooming in on. If you want to frame a particular area of your image to zoom in on, use the tool to click and drag a zoom rectangle.



Quick zooming and navigating with keyboard shortcuts

Place your cursor over the centre of an image, hold down the Spacebar, then click and drag to navigate around. To zoom in, select [Spacebar] + [Control] ([Spacebar] + [Command] on a Mac) and click. To zoom out, select [Spacebar] + [Control] + [Alt] or ([Spacebar] + [Command] + [Option]).

Moving around your images using the Navigator palette

With palettes and toolbars taking up a lot of room on your desktop, a large image opened in a small window can be difficult to work with, and this is where the Navigator palette can come in handy. Open a file and zoom in so that you only see a small area, then, if the Navigator palette isn't already open, select **Windows > Navigator**. Click on the thumbnail image in the palette and drag image around the viewing pane – it's a lot easier than using the image window's scroll buttons. There are also three ways to zoom using the Navigator palette – entering a new number in the field, clicking the Zoom In and Zoom Out buttons or using the Zoom Slider.



Lost in pixels

It's all too easy to get involved in fine-tuning your work, zooming in ever more closely, only to find that you've lost sight of the image as a whole – which part of the image are you looking at? Either check the location of the red square in the Navigator palette or zoom out a few times until you get your bearings.

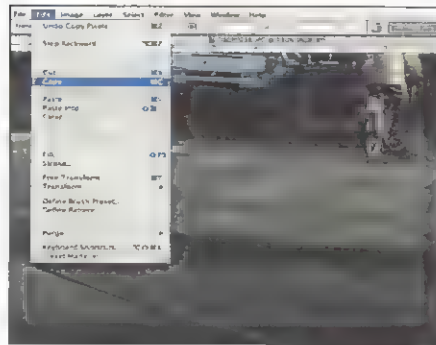
Keyboard shortcuts for copying and pasting



Open, save and close quickly

We've seen quite a few keyboard shortcuts on this page, and here are some complimentary ones. Create a new file by pressing [Control]+[N], Save a file with [Control]+[S] and Close a file with [Control]+[W]. As usual, the Mac equivalent of [Control] is [Command].

A great deal of Photoshop work is based around the process of copying part of an image and then pasting the copied area somewhere else. Although doing this via the menus



Yes, it's all very well using the menus to start with, but you're a big Photoshop user now!

is possibly safer, because we can see exactly what we're doing, once you get used to working with keyboard shortcuts for these kinds of everyday commands you won't look back. So, while the safe way is Edit > Copy and Edit > Paste, the savvy, faster method is [Control]+[C] to Copy ([Command]+[C] on a Mac) and [Control]+[V] to Paste ([Command]+[V] on a Mac). While we're on this subject, it's also worth knowing that [Control]+[X] (or [Command]+[X] for Mac users) performs the same job as Edit > Cut. Before very long, you'll find that your fingers will be reaching for these keys instinctively.



Copy Merged

If you're working with an image that contains multiple layers, Copy Merged is very useful option, as it allows you to copy all layers that are visible in the Layers palette as if they were one flattened image. You can select Edit > Copy Merged, or use the shortcut [Control]+[Shift]+[C] (that's [Command]+[Shift]+[C] on a Mac).

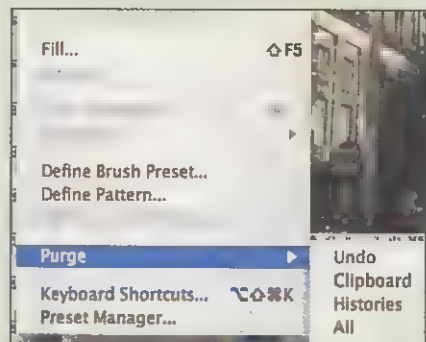
Photoshop running slow? Try purging the memory

There are certain features and operations in Photoshop that use up parts of the memory cache. The memory is literally used to 'remember':

(1) A certain number of past actions, so that you can use Undo to take backwards steps. (2) The Clipboard imagery, stored the last time Cut or Copy was used. (3) Previous Actions within the History palette – a similar function to (1), but with more control.

So there's potentially a lot of information in there, using up memory and slowing down the application. To clear one, two or all three of these memories, select Edit > Purge and select an option. Only do this if you find that Photoshop is

running slowly however, otherwise you might kick yourself when you find that you've dumped all those useful Undos or History states.



By all means, purge away – but beware of losing valuable Undos

Learn to think of Photoshop images as bitmaps

Photoshop images are often called 'bitmaps'. Bitmap images are made up of different coloured pixels, arranged in rows and columns to form the

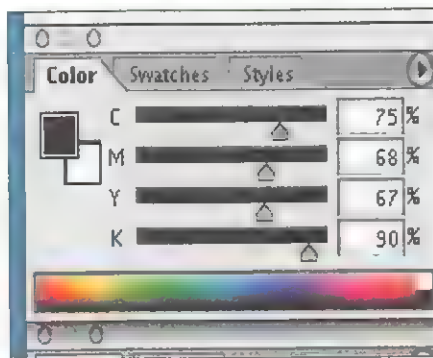
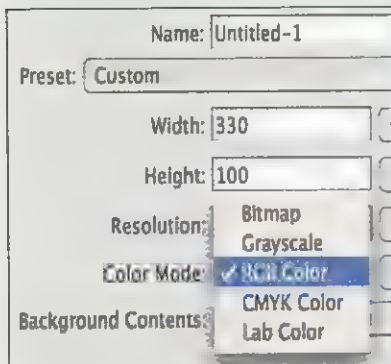


This highly-zoomed image clearly shows the pixels arranged in a grid

image (whereas vector graphics, as created in applications such as Illustrator, aren't made up of pixels, but of transformable shapes). Zoom right into an image – see the pixels now? Because it uses pixels to create images, Photoshop is well suited to particular jobs, such as working with digital or scanned photographs, because these are also bitmap images made up of pixels. And, if you're looking for a 'painted' feel to a piece of artwork, with lots of tiny, graduated elements, then Photoshop is perfect. However, Photoshop is nothing if not versatile; there are ways of creating images in a vector style even if we know that they're actually bitmaps!

Always use RGB for screen-based work...

Three different colours are used to display colour images on monitors or TV screens – Red, Green and Blue. So, if you have this output in mind (and this, of course, includes web work), you'll need to create an RGB file on selecting File > New.



... and CMYK for print

Printing processes (even 'home' printers) mix together Cyan (C), Magenta, (M) and Yellow (Y), along with varying amounts of Black (K) to create darker shades. Open your printer; you'll see there's a colour cartridge containing three colours (some printers now have more) and a separate black cartridge.



How CMYK and RGB are mixed

RGB mixes in values of 0-256 of each colour. CMYK is mixed in percentages of cyan, magenta and yellow to create the colours, and black to adjust brightness. However, select a pure black from the pre-mixed colours and note how, surprisingly, this is mixed with varying percentages of each colour.



Work with RGB

When creating an image that will be printed, don't set the Color Mode to CMYK; you'll notice that various features are non-accessible in this mode. Start in RGB, then, when you're ready to save for print, select Image > Mode > CMYK. In fact, most home printers will happily convert the RGB colours to CMYK, so you don't even need to do this!

Look out for the colour gamut warning

As you're mixing colours in the Color palette, you may see a triangle with an exclamation mark. This means a colour is unprintable, so you should pick another colour if you intend to print your work. Adjust the sliders, or click the suggested colour until the warning disappears.



Use Web Only Colors

If you select a foreground colour via the Toolbar button, the pop-up shows an Only Web Colors tick-box. Tick this to ensure that your colour looks the same across the wide range of monitors your web audience may be using. You can also set the Color palette to display Web Color Sliders, via the palette's fly-out menu.



Save an image as Grayscale to reduce the file size



Use the Color palette ramps

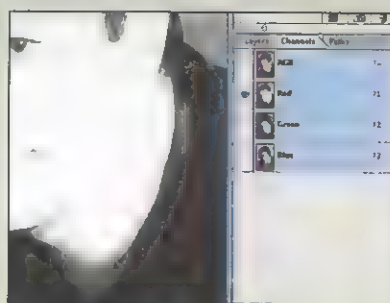
Don't feel that you always have to use the sliders to select colours in the Color palette. You can choose them directly from the colour ramp along the bottom of the palette, then, if necessary, tweak for accuracy using the sliders. Using the fly-out menu, you can even set the ramp type independently of the sliders.

The more channels that an image contains, the larger it will be. Open an RGB photo and then open the Channels palette – you'll see that the image contains three channels. Save the file with a unique name. Then select Image > Mode > Grayscale and note the change in the palette – the image is now made up of just one channel. Save the file with a new name, and then compare the file sizes of the two images. So, if you're not too concerned about saving an image in full, glorious technicolour (or maybe you just prefer greyscale anyway), this is a good way to knock a decent chunk off the file size – it's particularly useful for web images.

Don't expect to get a perfect colour match every time

There are ways of controlling how colour is interpreted and dealt with in Photoshop, but unfortunately not every colour 'from nature' can be printed, or displayed on screen. The most that we can hope for is that Photoshop helps us to create the best simulation of a particular colour, and it usually does.

Understand how your images are made up of channels

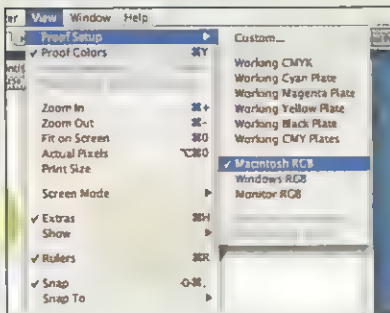


A Photoshop image is made up of a number of channels, which can be thought of as coloured 'gels', which, when overlaid, make up the image. Open an RGB file, then open the Channels palette, and you'll see four thumbnails. RGB shows all three channels together; Red shows the red colouring in the image (white represents areas with the most red, black shows where there is less) and likewise for Green and Blue. CMYK files contain five channels – one for each colour and a composite channel – and extra channels can be added. This helps us to understand the picture's make-up, but we rarely edit channels – it's much easier to use the Layers palette.



Proofing for Mac or Windows monitors

Open your RGB image and select **View > Proof Setup > Mac RGB**, then **View > Proof Colors** – this simulates your image as viewed on a Mac. Then proof for Windows RGB and note the difference in colouring. If your image largely contains web-safe colours, it shouldn't be too drastic.

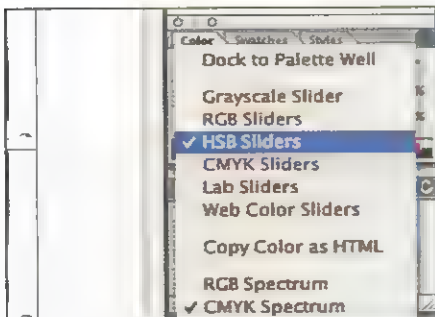


How to find unprintable, oversaturated areas

Before sending your image off to print, it helps to know if there are any oversaturated colours that the printer won't reproduce. The printer should just replace the unprintable colour with the closest approximation, but that might not be good enough. Select **View > Gamut Warning**; problem areas are marked in grey.



Don't be scared!
It's all too easy to be overwhelmed by the multitude of modes, features and options in Photoshop, but don't let it worry you. For example, there are various colour modes, but the only ones you need worry about to start with are RGB, CMYK and Grayscale – they cover 99% of everyday jobs.



Hue, saturation and brightness – another way to mix colours

As well as adjusting the RGB and CMYK values, we can also mix colours in the Color palette according to their hue (colour), saturation (intensity of colour, for example 'neon' or 'grey') and brightness values. Set the colour sliders in the Color palette to HSB and try it out.

Preview a CMYK conversion against its RGB original

Here's an easy and practical way to compare a CMYK version of an image with its original RGB format, without actually making the change. Open the RGB file, then select **Window > Arrange > New Window for...** so that a new, identical window opens. Then select **View > Proof Setup > Working CMYK** and then **View > Proof Colors**. This simply provides a CMYK proof of your image, so you can place the versions alongside each other and compare them – you'll probably notice that very saturated (rich in colour) shades have dulled a little in the CMYK version, so the inks can cope. Then, if you like what you see, you can make the conversion to CMYK and print your image.



Be easy on the eye
Check the saturation levels of colours you use. When you're choosing them, they might seem reasonable enough, but when exported as a background image that spreads across a whole web page – ouch, that hurts! The HSB sliders can be useful here – just drop the Saturation a few notches.

Set up your own palette layouts

Palettes can have a habit of taking over your work space – so learn to manage them



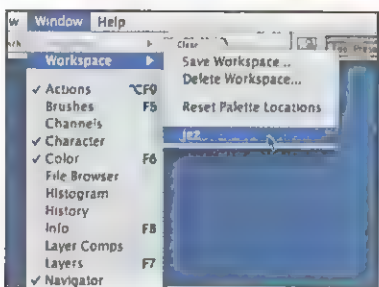
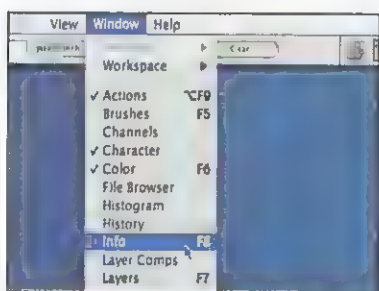
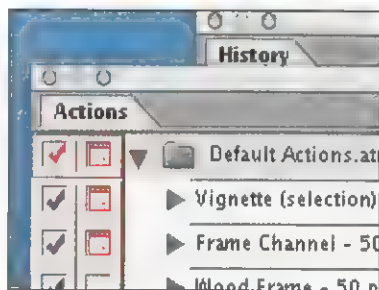
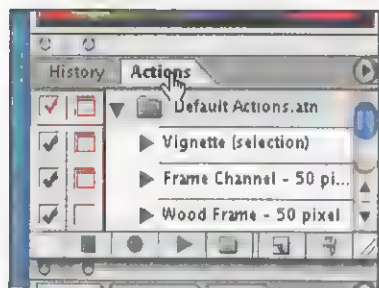
Different workspaces for different jobs

Why not create different saved workspace settings for different jobs? If you're doing a lot of text work one day, you might need to use the Character and Paragraph palettes, combined with the Layers and Color palettes, whereas another day might involve more Brush work, so you could save a different palette arrangement for these jobs.



Palette menus

Note that each palette has its own fly-out menu. Click it to see options which are specific to that palette (note that you may also find these settings elsewhere). Sometimes these settings seem to be rather hidden away, but, once you know where to look, you'll appreciate it as good ergonomic design.



On opening Photoshop you'll see a number of palettes open on the right of your desktop. You may end up using all, or only some of these in your everyday work, so it's a good idea to learn how to arrange them. Note that some of the palettes are grouped together – you can access them by clicking on the tabs at the top of each one.

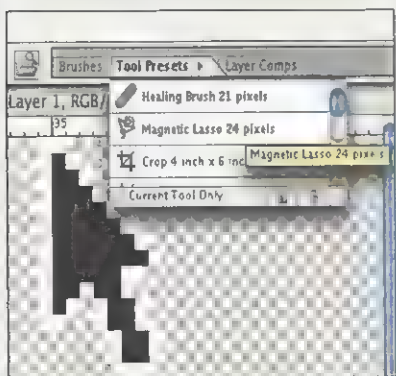
Now try grabbing a palette by the tab and dragging it away so it unlocks itself from the group. This enables you to remove palettes from your layout if you don't need to use them. Similarly, click on the tab of the palette that you just removed, and drag it back so it snaps into place again.

You can see a full list of all the palettes, and whether they're open (ticked) or closed (unticked), in the Window menu – this can help you seek out hidden palettes on the screen. If a palette is hidden within a group, it will also show as closed in the list. Also note that there are Function key shortcuts for opening certain palettes.

When you have the palettes set up just the way you want, select Window > Workspace > Save Workspace and give it an identifiable name. Next time you open the Workspace menu, your new workspace will be there to select.

Store spare palettes in the docking well

Rather than laying palettes out in your main work space, you can drag and drop them into the docking well. They sit there out of the way until you click their tab to open them – then click anywhere else and they neatly close back up.



Use colour profile presets for different projects

Good colour management ensures that images you create and read in Photoshop are set up with the correct colour profiles for the job, so in theory you shouldn't spend too much time scratching your head, wondering why everything has a funny tint when it's printed, or looks darker online. Open Photoshop and in Windows/Mac OS9, select Edit > Color Settings; in OSX select Photoshop > Color Settings. The Settings menu enables you to select preset profiles such as Web Graphic Defaults, Europe Prepress Defaults and US Prepress Defaults. Europe General Purpose Defaults covers the correct settings for most everyday work, in the UK at least.

See the effects of different colour profiles

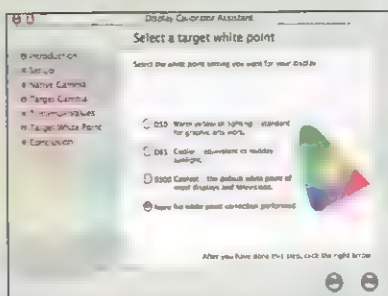
Open a file and select Image > Mode > Assign Profile. In the pop-up dialogue you can tick the Profile box and select different profiles from the list. As long as Preview is ticked, you'll see the changes in your image without actually having to make the change.



Mismatched colour profiles

Sometimes you'll open or import an image into Photoshop and find that the colour profile doesn't match the current Photoshop settings. Photoshop can be set to warn you whenever this mismatch occurs, or you can turn these warnings off and trust Photoshop to convert the image properly. In the Color Settings window, tick or untick Profile Mismatches and Missing Profiles.

Are your colours 'out'? Try calibrating your monitor



If your colours seem a bit 'out' when you view them on the monitor, or there seems to be a colour tint on the screen, try calibrating your monitor. First set up the lighting around your computer so that it's typical of your everyday working arrangement. Try to block out reflections from windows if possible, as they can throw your judgement of what looks 'right'. If you're using Windows, you'll find the monitor calibration controls under Start menu > Settings > Control Panels. On an OS9 Mac, select Apple menu > Control Panels > Monitors and on an OSX Mac select Apple > System Preferences > Displays > Color > Calibrate. Then simply follow the instructions to ensure that your monitor is performing correctly.



Quick black and white

Many jobs, such as sketching or painting masks on to layers, require the use of pure black and white. You can quickly set these as your foreground and background colours respectively by clicking the Default Background and Foreground Colors button to the bottom-left of the two colour buttons at the foot of the Toolbar. You can also select the default black and white colours by simply pressing [D].

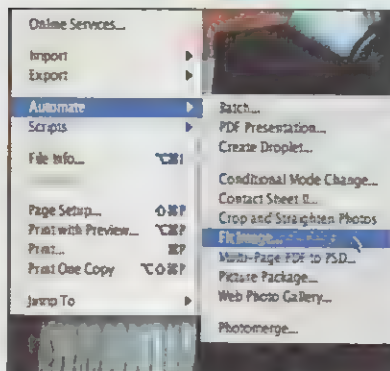


Correcting mirror images

If you have a 'mirrored' image – and this will be most obvious if the image features text – you can easily flip it back around. Select **Edit > Transform > Flip Horizontal**. Or, if the mirrored section is only part of an image, make a selection around it, Copy it into a new layer, and then flip the selection.

Resize images quickly with Fit Image

To resize an image to a certain pixel height or width without changing the scale or resolution, select **File > Automate > Fit Image**. This is particularly useful if you need to submit a picture to a website, and have to provide it at a specific size.



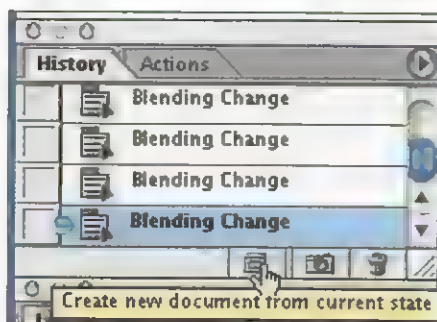
Finding the size of a flattened image

The status bar at the bottom of each image window shows the file size by default – but why are there two different figures? On the left is the size of the image if it were flattened (all layers merged into one) and, on the right, the size of the PSD as it stands, including all layers.



Save with layers

When you save a Photoshop file (a PSD) in which you've been working with layers that you may want to edit later, remember to ensure that the **Layers** box is ticked in the **Save or Save As** window. It's the default setting, but it's still worth keeping an eye out for, otherwise the image will be flattened on saving.



Back up your progress as you work

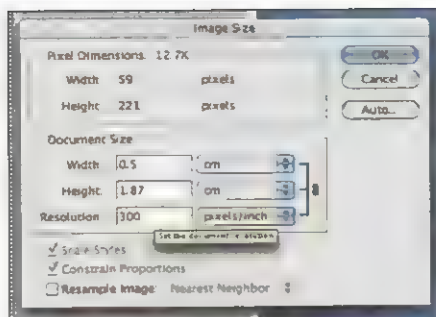
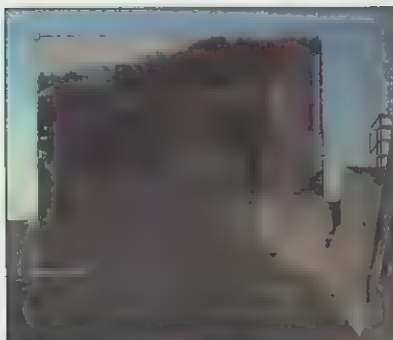
If you're making lots of complex edits in a Photoshop project, hit the History palette's 'Create new document...' button as you reach key points. Then save and close the new file – you're now free to continue, safe in the knowledge that you have the saved document to return to if everything goes horribly wrong.

Sort your images in the File Browser

In Photoshop 7, if you open a folder using the File Browser the images are displayed in thumbnail galleries, and you can sort the order in which they're shown. Click the **Sort By** menu at the bottom of the thumbnail window and choose a criteria – **Filename**, **Width**, **File Type**, and so on. In Photoshop CS, **Sort** is at the top-left of the File Browser. This can be useful if you're looking for an image taken at the start of a shoot, or a series of images whose file name shows which group of pictures they belong to. You can sort by **Date Modified** to track down images and projects you've been working on most recently. In this respect, the File Browser works like any other browsing system.

Quick transformations with a keyboard shortcut

There are shortcuts for many actions in Photoshop, but one of the most useful is [Control]+[T] ([Command]+[T] on a Mac), which activates the Free Transform Tool. This allows you to rotate, stretch or scale your layer, using the handles around the bounding box.



Change image resolution for print, without losing quality

Many images or photos downloaded from your digital camera will be at a resolution of 72dpi, which is what monitors read. But most printers print at 300dpi, so select Image > Image Size, untick Resample Image and set resolution to 300 pixels/inch. The image will be smaller, but the quality will be improved.

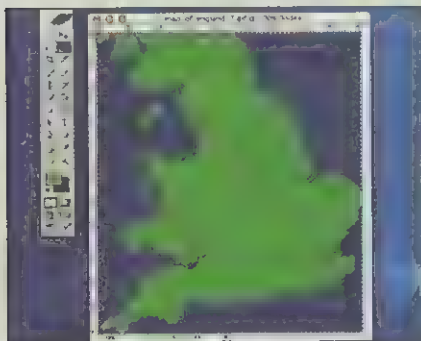


Measurements

Note that on many occasions we can use various measurements to set or read dimensions. Most notably, in the Image > Image Size window, we can set the Pixel Dimensions according to Pixels or Percent. The Document Size can be set according to various values, including mm, cm or inches.

Use the Magic Wand to select computer-generated 'flat' colours

The Magic Wand is an extremely clever and versatile little tool, which can be used to select areas of similar colour in your images. However, if we take



This map can be re-coloured by first selecting areas of flat colour with the Magic Wand

this capability to its logical extreme, setting Tolerance to 1 in the options bar, then the Magic Wand will only select blocks areas in which the pixels are exactly the same colour as the target pixels. This setting is unlikely to be very useful when working with photographs, in which even seemingly flat areas will fluctuate slightly in colouring, but it can help us to pick out computer-generated, flat-coloured backgrounds. Alternatively, to select the contents of a layer, untick Contiguous in the Magic Wand options, click the tool on the transparent area in the layer, and choose Select > Inverse – the layer contents will then be selected.



Making and moving selections

If you're using a selection tool such as the Rectangular Marquee or Lasso you can make a selection and then move it around by 'grabbing' the centre of the selection with the same tool and dragging it. However, first check in the options bar that the left-most of the four selection buttons – New selection – is activated.

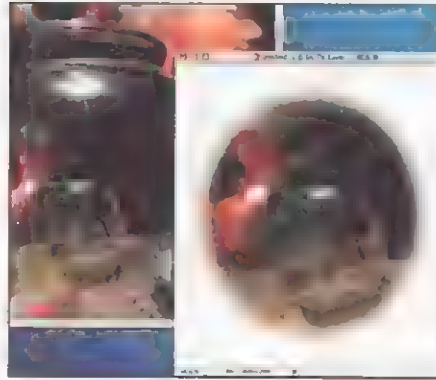
Give selections soft edges with the Feather option



Transforming selections

You can use the Transform function to make all sorts of shape changes to the contents of a layer, and the same goes for selections. Make a selection first, then choose **Select > Transform Selection**. Now move the mouse around the edges of the bounding box – the icons indicate what you can do if you click and drag at a particular point.

When making selections from images, we can slightly soften the edges of the selection by ticking the Anti-aliased box before using the



Part of the image on the left was selected with a 20-pixel Feather and pasted into a new file

tool. Without anti-aliasing, the selection is very sharp and harsh. However, this is an on/off setting, and only applies to the first couple of pixels around the edge. You may also notice the Feather setting in the options bar of each selection tool. Enter a value (in pixels) and the selection's edge will fade to transparency across this distance. This is useful in all kinds of blending scenarios – between images, creating montages, laying imagery over flat colours and so on. If you make a selection but forget to set the feathering first, don't worry – just choose **Select > Feather**.



Flip vs. Rotate

Flip and Rotate are two very different types of transformation – one flips the image end to end, as if it was printed on acetate and then literally flipped over, and the other rotates the image on an axis in the middle. You'll find both in the **Edit > Transform** menu.

Use all three Lasso tools by selecting just one

There are three different Lasso tools: the **Polygonal Lasso** for straight-edged selections, the **Freeform Lasso** for hand-drawn selections and the **Magnetic Lasso**, which follows the contrasted edge between two objects. However, sometimes you'll need to combine all three Lasso modes in one selection. Rather than switching between tools, which would involve lots of trips to the toolbar, and adding new selections each time, try this: select the **Magnetic Lasso Tool**, with its options set as required, then click and lead the tool along the edge of your object, clicking to add points if the tool doesn't find the edge. As you're doing this, if you need the

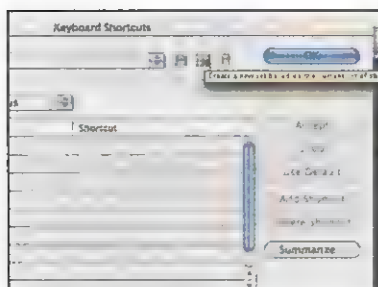
Polygon Lasso to add a straight section, simply hold down [Alt] and click. To switch to the **Freehand Lasso** hold [Alt] and drag the mouse to draw. See – three tools in one!



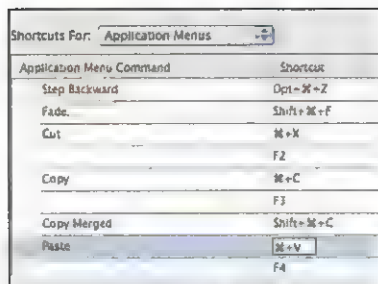
Use the Magnetic and Polygonal lassos together, without going back to the toolbar

Custom shortcuts

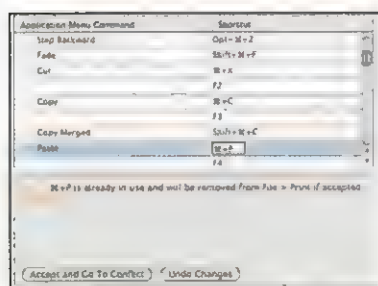
Change Photoshop's default keyboard shortcuts to your own combinations



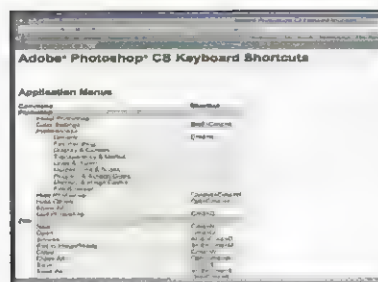
1 We all have different ways of working with our software, so if you're using Photoshop on a shared computer, you might like to set up individual keyboard shortcut sets. Go to **Edit > Keyboard Shortcuts** to open the dialogue. Click the 'Create a new set' button – the middle of the top three.



2 Give the new set of shortcuts a unique name (perhaps your name) and hit **Save**. The shortcuts are copied from the Photoshop defaults, so change the ones you want to.



3 If you try to create a shortcut using keys that are used for an existing shortcut, you'll be warned. Either hit **Undo Changes**, so you can try another key combination instead, or choose **Accept and Go To Conflict**, which changes the current shortcut, and then finds the conflicting one so you can reset it.



4 Once all your shortcuts are set up (it might be worth writing them all out by hand first – it can get pretty messy), you're ready to **Save** – click the button at the top of the window. To create a record of the whole set, click on **Summarise**, then open the .htm file in a web browser and print it.



Toolbar shortcuts

Ever noticed the **Toolbar shortcuts**? Simply open any image file and try hitting the **A-Z** keys randomly – you'll see that various **Toolbar** tools and options are selected and initiated, much faster than if you used the mouse. To see which key does what, or to change them, select **Edit > Keyboard Shortcuts** and set the **For: > Tools**.



View print size

When your image could be anything from 72 to 300dpi, and may have been cropped or transformed, you've probably got no idea how 'big' the image is when you want to print it. Select **View > Print Size** and the window will adjust its zoom to show you on screen.

BACK TO BASICS: WORKING WITH PHOTOGRAPHS

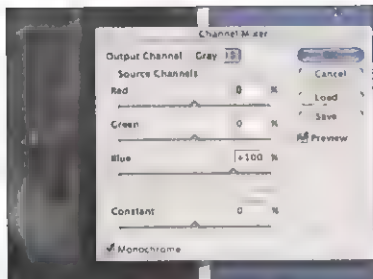
Photoshop started out as a photography tool, so we'll devote the first of our four specialised chapters to looking at the tips and shortcuts you'll find useful when working with photos

Photoshop was developed as a tool for working with photographs that had been scanned into a computer, and was perfectly equipped to deal with the emergence of digital photography. These days there is some stiff competition from other applications, such as Paint Shop Pro and Fireworks, but Photoshop was there first, and has always been the industry standard – the others don't even come close. Part of the appeal of using Photoshop these days is its versatility, and its ability to tackle 'non-photographic' jobs such as illustration and design (which we'll look at in the next couple of chapters). However, it

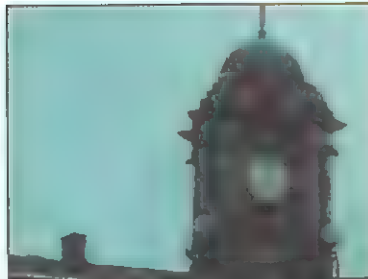
makes sense to start by looking at its photo-manipulation functions.

From bad to better

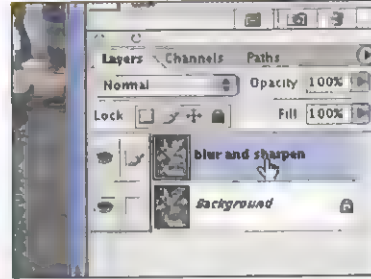
We've all been there: you scan a photo, or download it from a digital camera, and the result's not quite what you hoped for. The colours are distorted, or the resolution is wrong, or the composition isn't what you remembered. This is where Photoshop comes in. We'll look at the best ways of dealing with the everyday problems that crop up time after time. Some of the solutions may not seem immediately obvious (which is why we're here to point them out!), but, with repetition,



Page 31 Use the Channel Mixer to create powerful 'black and white' images



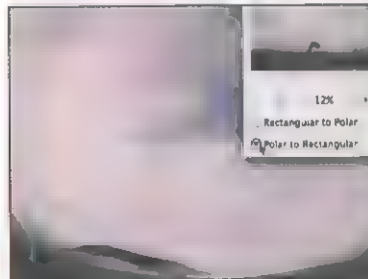
Page 32 Play with blending modes to re-colour photographs with unusual tints



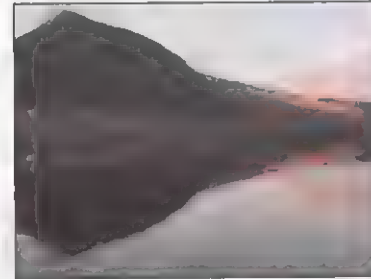
Page 33 The Blur and Sharpen tools can be used to draw the viewer's focus



Page 34 Use the Healing Brush to clean up spots and blemishes in portraits



Page 42 Try out some of the more unusual filters for dramatic distortions



Page 45 Photoshop CS's Photomerge feature easily creates 'joiner' images

you'll see how the various features and functions of Photoshop can be used to their best advantage.

Tweaking and correcting

You'll run into a variety of problems when working with photographs, and sometimes you'll want to correct an image so that it looks 'right'—or at least as close as possible to what you envisaged when you took the picture. On other occasions you may want to suggest new meaning in a picture by manipulating it in a particular way, and Photoshop can help you do this too. There are different methods for applying many of the corrections and enhancements,

so we've highlighted the fastest, easiest and most easily-controllable ways of doing various jobs.

Photos in artworks

In this chapter we'll look at how photography can be used creatively, but the later chapters dealing with design, illustration and mixed media also elaborate on this theme. Photography is often used as a starting point for an illustration, or design work, as it's such an instant and accessible method of capturing images. So, while we cover a lot here, to really start thinking outside the box (Brownie), make sure you check out these later chapters.

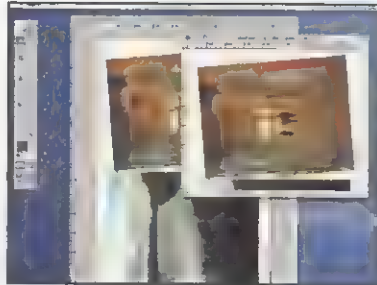
Correcting 'crooked' images

Here are a few tricks that can be used to straighten out badly scanned images



Starting over

Sometimes it's worth admitting defeat, and starting your project again from scratch. If you've taken a really bad photo, or used the wrong scan settings, it's often better to start over, rather than spending ages trying to fix the problem in Photoshop.

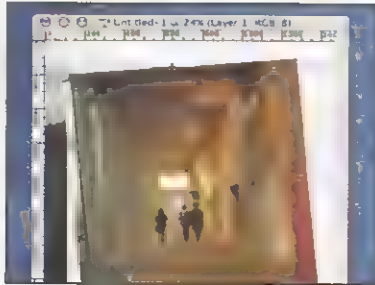


Open the scan.jpg from the disc – you'll see that one of the two images we've scanned has slipped. Select the Rectangular Marquee Tool first, and make a selection with a wide margin around the 'wonky' image. Then do [Control]+[C] (Copy), [Control]+[N] (New file) and [Control]+[V] (Paste). Mac users replace [Control] with [Command].

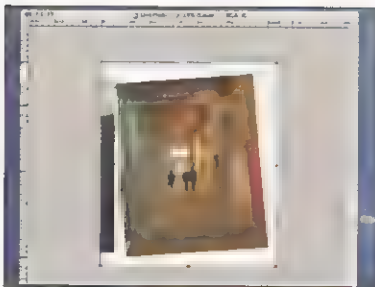


Always duplicate

When starting a new Photoshop project, always duplicate your original layer – if you're tweaking a photo, this will probably be the Background layer. The shortcut for this is to drag and drop the Background layer on to the 'Create a new layer' button in the Layers palette. Now you can safely work on the duplicate, knowing that you have the original as a back-up.



The whole canvas needs rotating, so select Image > Rotate Canvas > 90° CW (clockwise). Now we'll use a Guide to help us to finish correcting the rotation. Make sure that View > Rulers is ticked on and View > Snap is off. Then click in the ruler across the top of the image window, drag down so that a Guide appears.



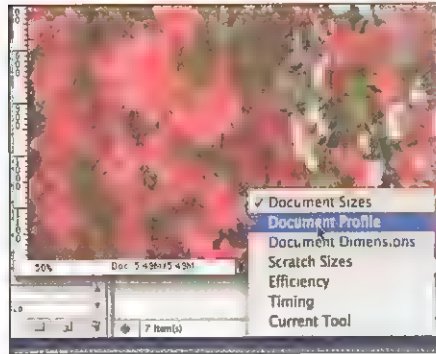
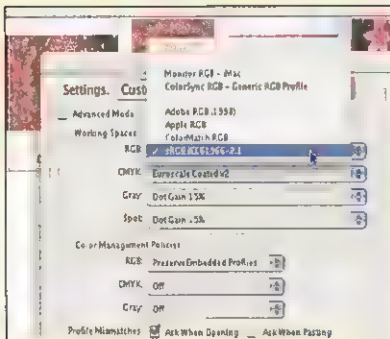
Using the Move Tool, this Guide can be dragged and repositioned, and, because we turned off the snapping, we can position it a few pixels from the top of the image to align the photo – do this now. Then, making sure that you have the image layer selected, hit [Control]+[T] ([Command]+[T] on a Mac): the Transform shortcut.



With the Transform box open around the image, hover your cursor just outside a corner until the rotate icon appears, then click and drag the image to rotate it until it aligns with the Guide. You can also move the image to a better location by dragging, so that it aligns better. When it's aligned correctly, hit [Return] and crop the image down.

Check your Working Space colour settings aren't reset

When opening digital images with mismatching colour profiles, check that your Working Space profile (the general, default profile used before images are opened) isn't altered along the way; if you turn off the mismatch warning, it may be set to Monitor RGB, instead of sRGB.



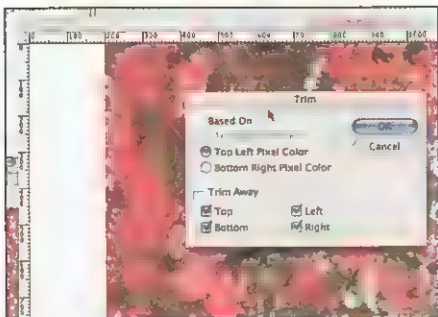
Quick colour profile checking

It's easy to find out the colour profile of your image. Simply look at the Status Bar at the bottom of your open image window. Where the default readout shows Document Sizes, click the fly-out menu arrow and select Document Profile. To change the profile, select Image > Convert to Profile.



Scan at high quality

As most printers print at least 300dpi, it makes sense to scan at the same resolution, so that you can print your image at the best possible quality. You can't scan at 72dpi, then change the resolution and expect to keep the image the same size and sharpness – it will just look pixelated. Likewise, always scan in colour; you can always convert a colour image to greyscale, but you can't convert the other way.



Let Photoshop do your cropping with Trim

Rather than using the Crop Tool, try using Trim – it's quicker. Open a scanned image, or one with a flat colour background that needs cropping out. Select Image > Trim. Then select the area to be trimmed (here, the 'top-left' pixel defines all the white in the image), and select the area you want to Trim Away.

Dealing with mismatched colour profiles

On page 21 we looked at colour profiles – mathematical colour algorithms for each image. On opening a digital photo fresh from your camera, you may see the Profile Mismatch warning, with three options: 'Use the photo's original profile'; 'Convert to Photoshop's Working Space' profile; or 'Open with no profile'. If this warning annoys you, close all images, open the Color preferences and untick Profile Mismatches: Ask When Opening. In Color Management Policies, choose a default method that will always be used to convert mismatching images – Preserve Embedded Profiles will keep the images true to their original colouring.



Turn off snapping when cropping

Many photo cropping jobs will require you to use the tool close to the edge of the image, and, if snapping isn't turned off, you'll find the crop annoyingly jumping to the edge. Untick View > Snap to prevent this – but remember to turn it on again when you're done, as this function can be useful.

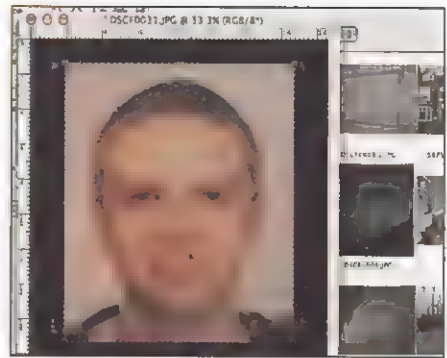
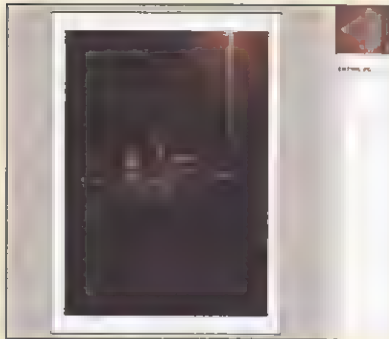


Photo shooting information

Photoshop CS's File Browser can be used to browse information about digital camera images. You don't even need to open the images. Just use the File Browser to find some, select one, then check the Metadata panel at the bottom-left of the File Browser. The Camera Data (Exif) relates specifically to how the photo was taken.

Quickly create background space to frame an image

Select the Crop Tool, and draw a marquee around the entire image. Then grab a marquee corner handle and drag outwards. To enlarge around the centre, hold [Alt]; to enlarge to scale, hold [Shift]; to create a symmetrical frame all around, hold [Alt] and [Shift].



Cropping around a central subject

You will often need to crop a photograph around a central subject to make that subject the focal point. To make sure that you have equal spacing all around the subject, select the Crop Tool, then hold down the [Alt] key, click on the subject, and drag the crop box outwards.



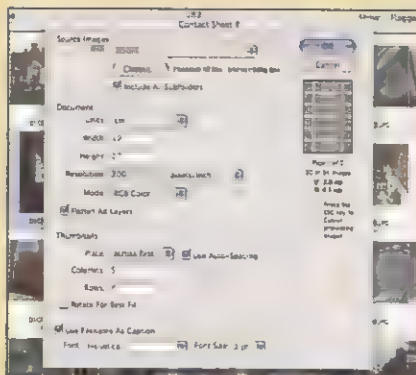
Keep all your photos

Even if you think a photo is a dud and should be deleted, don't bin it – you may find a use for that accidentally out-of-focus, blurred texture in the future. As long as you maintain a logical filing system for all your folders of images, and have a relatively-large hard drive, it shouldn't matter how many photos you keep hold of.

Create a professional contact sheet to display your prints

Let's say that you've been out on a shoot and come back with 30 photos, of which your family, friends or client

may choose five or six to work with or print out. You could show them each image separately, but how about compiling all the images from the shoot on one A4 page? It's easy. First put all the images into one folder. Now Select File > Automate > Contact Sheet. Set Source Images to Folder, then choose the folder. Leave the Dimensions as they are, but set Resolution to 300 pixels/inch for a good quality A4 page. Thumbnails can also be set up as you wish. Tick Use Filename As Caption, so whoever is picking out the images will have a name to use. Hit OK and watch Photoshop do its magic; you can print out the contact sheet if necessary.



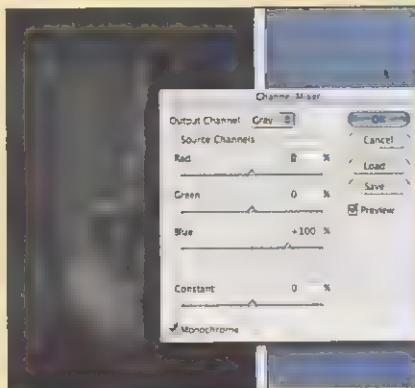
Creating a contact sheet is a practice that clients and friends alike will appreciate

Create 'realistic', adjustable black-and-white photos

Yes, we can do Image > Adjustments > Desaturate or Mode > Grayscale, but that doesn't always give satisfactory results – and there's no control over the effect. Instead, start with your colour image (open hallway.jpeg from the CD) and select Layer > New Adjustment Layer > Channel Mixer.

In the Channel Mixer window, tick **Monochrome**, and we're halfway there. Try setting each colour in turn to 100%, while the others are set at 0%; note how this works like a colour filter on a camera lens. For example, setting Blue to 100% and the others to 0% stresses the 'blue' daylight shining through the image – setting Red to 100% stresses the redder artificial lamp light. Also

note that this effect can be turned off to return to the original colours – simply hide the adjustment layer.



With the Blue channel set high, the Channel Mixer acts as blue filter, emphasising daylight



Dodge and Burn

There are various brush tools which can be used to touch up problem areas in your images. The Dodge Tool lightens, while the Burn Tool darkens, their names coming from the traditional darkroom techniques whereby frames and paddles of cardboard are used to expose photo paper according to how much light is allowed through.

Make a note of dimension sizes and other information

A lot of Photoshop work is fairly intuitive, thanks in large part to the program's interface, which is laid out in a pretty 'common sense' fashion. However, sometimes information



You can easily work out what resolution in pixels your scanned images will need to be

such as dimension sizes will need to be noted as you work them out, to be used for future reference. When scanning images, let's assume that you're scanning at 300dpi (for high quality images) and full RGB (not greyscale). If your photographic print is 2x3 inches, the file will be 1.66MB, with dimensions in pixels of 600 by 900. 4x5inch prints are 5.44MB, with pixel dimensions of 1,200 by 1,500. 8x10inch photos scan at 21.64MB and 2,400 by 3,000 pixels. You can work these figures out using the Status Bar and Image Size window, but jot them down now and you won't have to do it again.



Quick contrast boost

If you open a photo and think it looks a little grey (un-contrasty), try this. Drag and drop the Background layer over the 'Create a new layer' button in the Layers palette, creating a duplicate. Then change the blending mode of the duplicate layer to Overlay. Dark colours make those beneath darker, and light ones lighten.

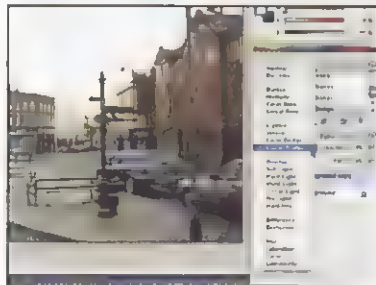
Learn to love layers

Layers have a variety of uses, and can be quickly used for maximum impact



Duplicate layers

If you apply a blending layer over a base layer but the blending mode's effect isn't strong enough, simply duplicate the blending layer. Duplicates of the layer stacked up (and note that the blending mode is also duplicated) will multiply the effect on the base layer. You can then select Layer > Merge Down to merge the top layers into one powerful blending layer.



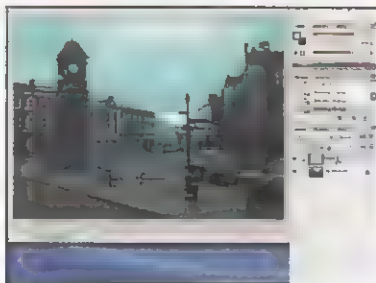
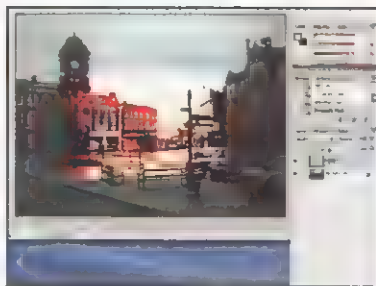
Layers can be used to make effective lighting and colouring adjustments to your photos. Open a typical photo, duplicate the Background layer and change the blending mode to Multiply. Multiply works by darkening the base layer where the blend layer is dark, having less effect where the blend layer is light. This is great for beefing up light, washed-out images.

Try the Screen blending mode in the same way – it has the opposite effect, only lightening where the blend layer is light. Use this on dark images. Note that Screen and Multiply are parts of two groups of blending modes that have the general effect of lightening and darkening in various ways, so try them all.



Blending with brushes

You can of course add any graphic content you like into layers, including Brush work. Which means you can partially tint photographs by painting into a blending layer on top, or adjust contrast where necessary. And the great thing is, if you don't like the effect, the layer can be hidden, or discarded altogether.

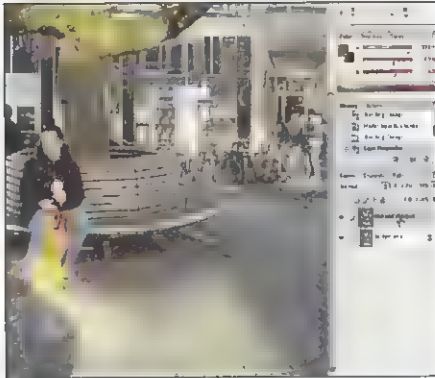


The Overlay blending mode is very clever. It combines screening and multiplying, so that dark blending pixels darken the base, and light ones lighten – great for increasing overall contrast. The Soft and Hard Light modes work in a similar way. The other Light modes are a little harsher, and should be used sparingly. Hard Mix creates a posterised effect in the base layers.

Hue imposes the Hue value of blending pixels on the base layer, and Colour tints using the Hue and Saturation values, as if with a coloured gel overlay. Saturation and Luminosity impose those two parameters respectively. For a full list describing the behaviour of each blending mode, go to Help > Photoshop and look under 'Selecting a blending mode'.

Highlight foreground subjects in 'busy' photos

If your photo has a lot going on in it, it may help to blur background areas and sharpen foreground imagery – it will help to draw the viewer towards



You can lead the viewer's eye through a photo by using the Blur and Sharpen tools

the subject. First select the Blur Tool, and, in the options bar, set Strength to 50% to start with and select a soft-edged, wide brush. Then duplicate your background layer, and blur any distracting background details, such as the bikes and posters here, avoiding foreground elements. Then, to pull foreground objects even further forward, select the Sharpen Tool and paint over them, but at a lower Strength setting than your blurring – the effect can easily look too jagged. If the overall effect is too strong, reduce the opacity to let the original background layer show through.



Push back distracting points of saturated colour

In a typical street scene, car lights, bright coats, shop displays, and the like will often unnecessarily steal the scene, just because the colours are so bright and saturated – or at least because your camera has rendered them in this way. Use the Sponge Tool to desaturate any overly-coloured areas.

Adjusting contrast to help Color Range selections

The Color Range function is typically used to select whole areas of similar colour in an image. You go to **Select > Color Range**, set **Select to Sampled Colors**, tick **Selection** and then use the Eye Dropper to sample shades directly from the canvas. But sometimes Color Range can do with a helping hand when deciding which areas to select. In the Layers palette, create an adjustment layer and select **Brightness/Contrast**, pushing the **Contrast up**. With this layer at the top of the stack, now try using Color Range again – the function should be much happier selecting similar shades. You can dump the adjustment layer when you no longer need it.



Let Photoshop make auto-adjustments

We can correct photographs by hand, but it's quicker to let Photoshop do it. Select **Image > Adjustments** and then choose **Auto Levels**, **Auto Contrast** or **Auto Color**, each one adjusting those parameters in an 'obvious' way; for example, **Auto Contrast** pushes the lightest shades in the image out to 'white' and the darkest out to 'black'.



'Newspaper-style' photographs

Some filters, (especially the useful ones!) often stay well hidden away in the lists. For example, the filter that renders an image as if it's been printed in a newspaper can be found under **Filter > Sketch > Halftone Pattern**. Set the **Contrast** to 50, rendering the whole image in just two colours for a small file size, and in a small size for maximum detail.

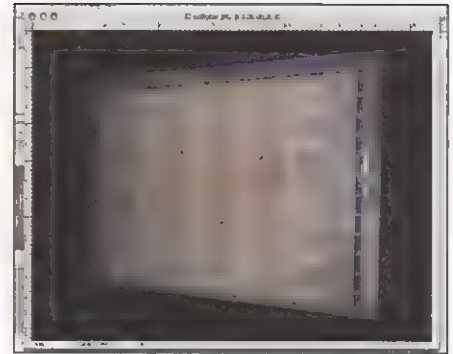
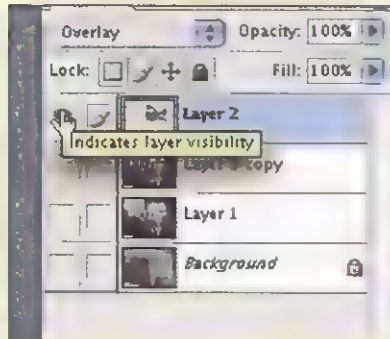


Working in new layers

Here's a tip to safeguard changes made to layers. Make a selection of the part of the layer that you'll be working on, then copy and paste it. The selected area will be pasted into a new layer, in exactly the same position and ready for you to work on it.

The trouble with Color Range – and dealing with it

Color Range makes its selections from all visible layers, not just the one you're targeting. So, if you just want to select the dark areas of one layer, you need to hide all the other layers first. Do this quickly by [Alt]-clicking on the target layer's eye icon in the Layers palette.



Make 'perspective' shapes flat again with Crop

From your CD open the image wallplan.jpeg, which needs cropping. Select the Crop Tool and draw a marquee covering the planner, just up to its edges. On releasing the mouse, tick Perspective in the options bar and refit the handles around the planner. Then hit [Return].



Moving the Background layer

You may notice that when you open photos, the original Background layer displays a lock symbol, meaning that you won't be able to move it once other layers are added later. To unlock it, simply double-click the layer and give it a new name – it will be converted into a new layer.

Fix dust marks, scratches and other blemishes

The Healing Brush is new to Photoshop 7 and CS, but works in a similar way to the Clone Tool. However, whereas the Clone Tool



The Healing Brush can be used to clear up every mole, wrinkle, dent and spot

samples pixels from one area of an image and paints them into another area, the Healing Brush samples the texture and blends this into the target area, using the target area's colour and luminosity values. Open a photograph containing a blemish and select the Healing Brush Tool. In the options bar make the Brush size quite large and 0% Hardness, and check Sampled. Find a suitable texture to sample from, hold down [Alt/Option] and click once. Then drag the brush over the blemish – you won't see the effect applied until you release the mouse. You can fix most photographic problems like this, and even iron out wrinkles, spots and moles.

Keep a CD back-catalogue of photos for easy access

If you have the technology, it's a good idea to regularly back up your photos to CD. This not only means that you're saving all your images in case anything horrible happens to your hard drive, but you'll also have an instantly reliable and accessible storage system – your very own image library!

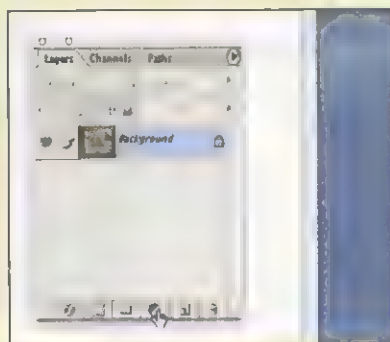
Using the Eraser tools for flat colour blocks



If you're trying to erase all or part of a large block of flat-ish colour, try the Background Eraser or Magic Eraser tools respectively. Select an image with a lot of blue sky, then select the Background Eraser. Set the Tolerance around halfway and Sampling to Once, so the first click you make in the brushstroke defines the colour that will be erased – try it. You can wipe out an entire sky, lawn, or beach in this way, without fear of accidentally affecting other areas. The Magic Eraser is even more impressive, as you only need to do one click, not a brushing action, to erase whole areas of colour.

Use adjustment layers for easy editing

You can tweak your photos by selecting **Image > Adjustments** and then picking from the list, but this permanently changes your layer (unless you use the History palette and Undo). A better way is to use adjustment layers, which can be edited or hidden at any stage.



Black and white, with hints of colour

Creating black and white images, but with certain areas retaining their original colour, can be very effective, and here's a simple, editable method of doing it. Select your top layer, and then add a Hue/Saturation adjustment layer which will fit in above it. In the Hue/Saturation pop-up, drop the saturation of this layer to -100 to create the black-and-white image. To paint the colour back in, use the Brush in the adjustment layer – 100% black paints full colour back in, while shades of grey paint in less colour, so the effect is really very malleable. This same technique can obviously be used for the application of any adjustment layer effect.



Use realistic photo filters

Photoshop is equipped with a range of subtle filters created to simulate the effects of using camera lens filters. Apply them as adjustment layers, and start with the default density of 25%, pushing that up if it's necessary. Use 'warm' coloured filters on naturally-lit, exterior photos, and 'cool' ones on interior, lamp-lit shots.



Solarise

Photoshop enables us to do some incredible things, but it's nice to know that we can still create traditional darkroom effects. Solarising usually involves exposing a print to more light halfway through the chemical 'fixing' process, but in Photoshop we just select **Filter > Stylise > Solarise**. In fact, this is one case of Photoshop giving us less control over an effect than we would have in the darkroom!

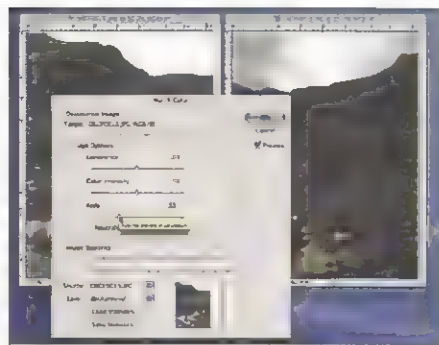
Adjusting lighting using Photoshop CS's Match Color



Quick filters

Note that if you use a filter and then need to go back to the Filters menu to find it again, it will be automatically displayed at the top of the menu list. This saves you having to remember which group of filters it's located under.

Let's say that you're out taking some landscape photos, but when you get back home you find that, on the perfect composition you captured, the lighting and exposure is all out,



Photoshop CS features Match Color, enabling you to 'borrow' lighting from other photos

while another, less well-composed photo from the same shoot is correctly exposed. Open both images, and select the badly-lit image. Then select Image > Adjustments > Match Color. In the dialogue set the Source to the other, correctly-exposed image. You'll now see the change previewed in the image, with the new colouring values sampled from the Source. If the colours seem a little too saturated, you can reduce the Color Intensity. You could also use Match Color to impose more 'natural' blue daylight on internal photos, where 'yellow' lamp lighting was used.



Getting more filters

Try doing a search on the web for 'Photoshop Filters' and you'll soon unearth plenty of places to download more – and often for free. Try www.thepluginsite.com, or look for new free packages of filters on the www.adobeforums.com site. Once downloaded, you then need to store the filter with the others on your hard drive, and restart Photoshop.



Making captions for your photos

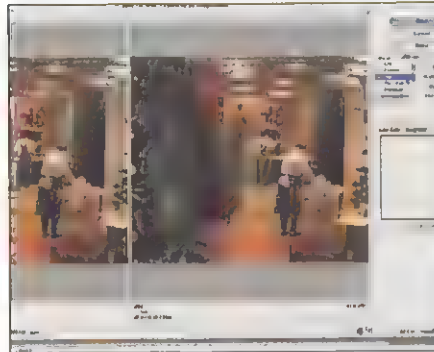
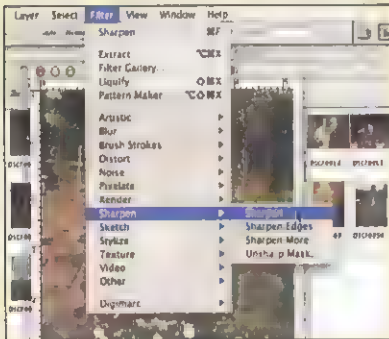
Set white as your background colour. Select the Crop Tool, draw a marquee around the whole image, then drag the bottom edge down a bit further and hit [Return] to create the caption space. Select the Type Tool, click at the start of the caption space and type a short description.

Increase contrast, but with soft focus

The fun really starts when you combine Photoshop features such as layers and filters. Try duplicating a photo layer, and change the top layer's blending mode to Overlay to increase the contrast (dark blending pixels are darkened and light ones are lightened, increasing the range of tones). We've seen this before, but now apply a Gaussian Blur (Filter > Blur > Gaussian Blur) to the top blending layer. Set it to around 3-6 pixels, so you can still clearly make out the main shapes. Or, in the top layer, do Filter > Stylise > Find Edges, apply a slight blur to give a less digital feel, and set that layer's blending mode to Color. This creates a soft-shaded image but with a hard, 'pencil' outline.

You've finished, but it's so blurry!

Blurring can sometimes occur after transforming or resizing photos, and if your project has involved a lot of this, you'll want to fix it before finishing up. Select **Layer > Flatten Image** if you haven't already, then **Filter > Sharpen > Sharpen (or Unsharp Mask for more options)**.



Saving photos for quick emails

Select **File > Save for Web** and hit the **2-Up** tab to show the original image on the left, and the optimised version on the right. Then click the **Image Size** tab and set **Height** to **400**, before clicking **Apply**. Set the **Preset** to **JPEG**, choose a quality and finally hit **OK**.



Selection keyboard shortcuts

When you're using a selection tool, four buttons are displayed on the left of the options bar—**New Selection**, **Add to Selection**, **Subtract from Selection** and **Intersect with Selection**. You can quickly switch between these by choosing **New Selection**, then holding **[Shift]** or **[Alt]** or **[Shift]+[Alt]** respectively. Try it, and notice the different cursor for each function.



Cropping images to print at a specific size

You can select **Image > Image Size** to resize images, but here's a shortcut. Select the **Crop Tool**, and in the options bar set **Resolution** to **300 pixels/inch**. Then enter the **Height** and **Width** (using 'in' to specify inches and 'cm' for centimetres) and draw a crop marquee around the image. Finally, hit **[Return]**.

Keep a library of 'fixing' source images to clone from

We all take photographs that may seem useless to us when we open them in Photoshop, but, if they contain any areas of interesting texture, such as walls, grass, plant undergrowth, skin and so on, you should keep them. The next time you need to cover or patch something in an image, you may find the perfect texture for the job in your library of 'texture images'. When this situation arises, open the 'texture' image and your photo. You can then use the **Clone Stamp Tool** to sample the source photo's texture, and paint it on to the problem area in the main picture. This is a great method for removing unwanted background elements.



Transform together

If you're doing a **Free Transform** and have several changes you wish to make to a layer, such as **Scale**, then **Skew**, then **Perspective**, make sure you do them all at the same time, rather than hitting **[Return]** after each one, then transforming again. When we Transform, there's always a loss in quality, and this keeps it to a minimum.

Use filters to blend out speckling



Rotating by hand

If you're using the Free Transform method to rotate a layer, you'll need a steady hand. For fine rotations, try starting your 'click-and-drag' action with the mouse at a point much further away from the layer's pivotal point. This should allow for a finer, more accurate touch – great for slight corrections to scanned images.



Photoshop can improve badly-lit photos, but you still need to fix that speckling

Photos taken in poor lighting can be improved using adjustment layers, or layers with various blending modes applied, typically Screen mode. But, however much you try to draw a photo out of the darkness, there will usually be some kind of speckling, especially in the areas that were darkest to start with. So, once you've got everything else finished off and flattened into one layer ready for printing, or putting on the web, here are three methods which should help reduce the speckling effect. First, try applying Filter > Noise > Despeckle, ironing-out the contrast between speckly pixels. Or, select Filter > Noise > Median, which is an 'oil painting' type filter – try it at the lowest level of 1 pixel first. Finally, try Filter > Blur > Gaussian Blur, again set to its lowest level.



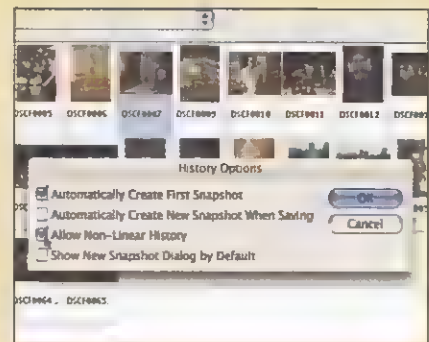
Adjustment layer controls

Using adjustment layers is preferable to making adjustments direct to an image for a number of reasons. First of all, the layer isn't permanent, so it can be altered or deleted later. Furthermore, if you double-click just to the right of the name of an adjustment layer in its layer thumbnail, further options become available for your editing pleasure.

The History palette: Linear or Non-Linear?

The default setting for the History palette is Linear Mode. This means that you can select earlier states (or changes) in a project to go back to, but all subsequent states are greyed out, and will be lost if you start working again from an earlier point. However, for more flexibility, try selecting the Non-Linear mode. Open the History palette's menu, select History Options and tick the Allow Non-Linear History box. Now try using the History palette again. Notice that if you select a previous state and then start working, all those subsequent states that would have been lost before are preserved. This enables us to work more flexibly, and also to

'clean up' the History palette by deleting previous unused states. As ever, the best way to discover all this is to experiment.



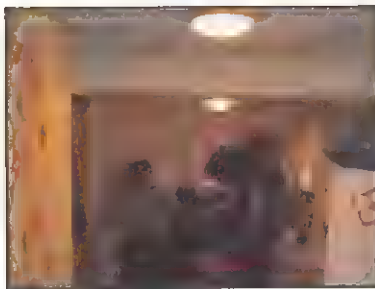
Try using the History palette in Non-Linear Mode for more flexibility

Understanding lighting

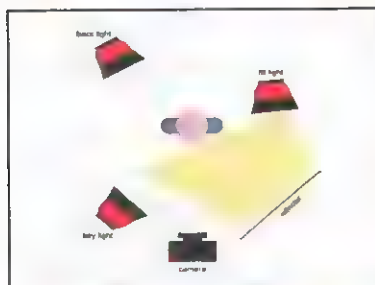
If you light your photos well to start with, you won't spend unnecessary time adjusting them



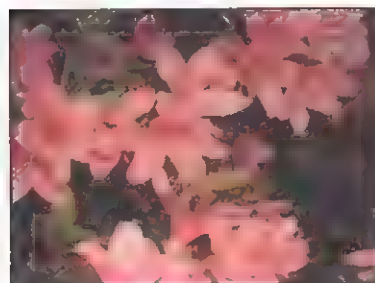
Most problems in photography arise from light – too much, too little, shining from the wrong side, or the wrong colour. The best way to cut down on Photoshop correction work is to make sure you have a good light source when you take the photos in the first place. Whenever possible use natural daylight, even if it's just from a window.



If natural light is a little lacking, use a room's artificial light by all means, but remember that most bulb light is red/yellow, and will need correcting later (using an adjustment layer such as Photo Filter or Color Balance) if you want a cooler, natural feel. Also, if the source is a fixed ceiling light, you don't have very much control over its direction.



If the budget for your shoot stretches to it, hire some professional photography lamps – ask for a set of two or three 'redheads', some stands, and coloured 'gels' which can be used to create blue 'daylight'. If you're shooting a portrait use three lamps: one key light, a fill light and a backlight.



Most cameras these days offer some kind of flash. Auto-settings are great for quick snaps, but also experiment with 'forced' flash, or turning the flash off and using a long exposure, steadying the camera to avoid shake. Remember, white surfaces will reflect light, and this can be used to your advantage – use a large white board to reflect flash and provide some extra 'fill' lighting.



Colours from photos

We can use the Eyedropper Tool to sample colours from photos, but you may find the results disappointing if the specific pixel you clicked on turns out to be very different from the colour's overall appearance. In the Eyedropper Tool options bar, change Sample Size from Point Sample to 3 by 3 Average or 5 by 5 Average, and try again.



Testing filters

There are various ways to 'test' the effects of a filter without applying it permanently. Apply the filter first, then, to see the difference in the image, select the previous state in the History palette. Alternatively, duplicate your photo in a new layer and apply the filter to this layer, then use the eye icon to toggle the layer's visibility on and off.

Digital or film – the pros and cons



Quick colouring

To colour a photo with one colour, open the photo and select the Paintbucket Tool. Set Mode to Color and Tolerance to 255. Then select a colour with which to tint your image, and click anywhere in the image to tint it. Note that this is the same as filling a new layer with the colour, and setting the blending mode to Color.

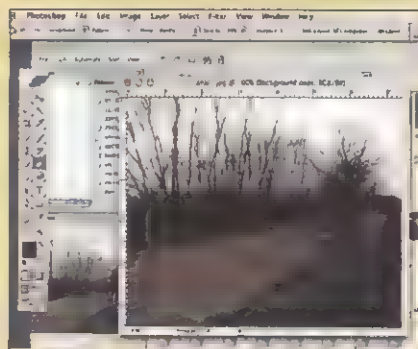
Yes it's that eternal argument amongst photographers. Which is best, digital or traditional film photography?

The main issue that you need to consider is quality, and by that we mean the resolution of your photos. Film prints are usually of a higher resolution, but you also then need to scan them at a high resolution (at least 300dpi) to match that quality – even higher if your computer will cope with the resulting large files. If you need the images to be any larger than this, you should have large prints made and then scan those – don't try and enlarge them in Photoshop.

Digital cameras are great if you don't need the images to be too large, or

you're shooting for a web output.

Beware of using cameras with 'digital zoom' as quality is lost – 'optical zoom' works much better, as it uses the lens.



This photo was taken on a digi camera and is shown at 100% size – it's too small for printing



Instant coloured layers

You can create flat layers of colour with just one click of your mouse. In the Layers palette, create a Solid Color adjustment layer and, in the Color Picker, select your colour as usual and hit OK. Then you can treat the layer as any other (changing its Blending Mode and so on), and also double-click to open the Color Picker for that layer again.

Use a tripod to capture natural light

No photographer likes having to try and simulate the 'natural light' of an environment in Photoshop. There are, of course, ways to do it, using



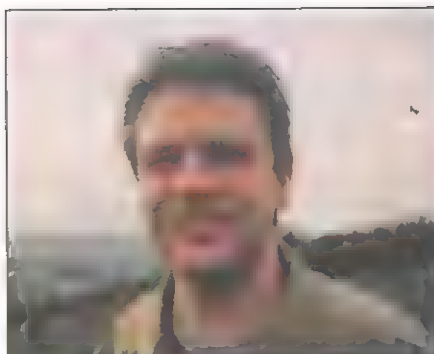
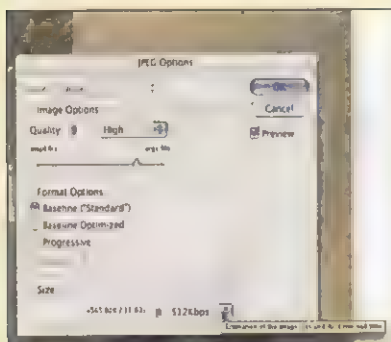
Using a tiny minipod, I took this long exposure in the reflection of a teapot

the Photo Filters or other lighting methods, but why bother if you can use natural light?

First turn off your camera flash, as you'll be going for a long exposure using only natural light. Now to steady the camera. Many tripods are lightweight enough to be easily carried around with you, and can be quickly set up when needed. Or you could use a monopod, which is even more compact, and has one leg instead of three. You can even buy mini-pods, which are tiny, and sit on walls or other flat surfaces – basically use anything that allows you to save the camera from shaky hands.

JPEGs make for faster downloads

If you save a photo as a JPEG (File > Save As...), you'll be asked to set the Quality in the JPEG Options window. This basically controls the compression levels for the visual information, and you can check the estimated file size and download speed in the Size readout.



Don't forget to have fun!

Just because Photoshop is a professional photo-editing tool, this doesn't mean that you can't have fun as well! In fact, if you're using Photoshop for work, it's a good idea to 'play' every so often – it will keep those inappropriate, whacky ideas out of your 'serious' work, and also keep the creativity flowing.

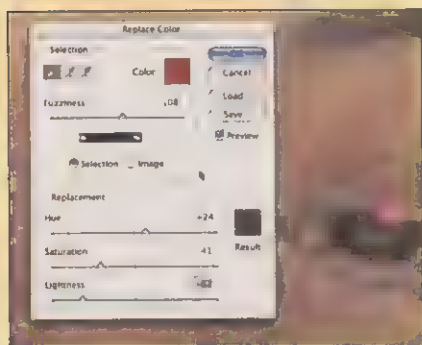


Stacking adjustment layers

Remember, you can stack adjustment layers just like any others, so that their effects accumulate. For example, first add a Brightness/Contrast adjustment to up the contrast in your image a little, then warm up any cool tint with a tweaked Color Balance layer. You can also change the opacity levels, so the layers work even more sensitively together.

Dealing with 'red-eye' from flash

To start with, we should point out that 'red-eye' can often be avoided in photography. The old method is to ask your subjects to look slightly away



You can remove 'red-eye' effects from your photographs easily using Replace Color

from the camera. These days, many cameras have a red-eye flash setting which activates the flash just before the shot is taken – this makes the eyes accustomed to the light first.

There are a few ways of dealing with red-eye problems in Photoshop too, mostly revolving around replacing the red, or desaturating it. Start by making elliptical selections around the affected eyes. Then use the Sponge Tool, set to Desaturate, to dull down the radiance of the red into a darker brown. Alternatively, select Image > Replace Color, use the Eyedropper Tool to select the red shade from the picture, and then mix a new eye colour with the sliders.

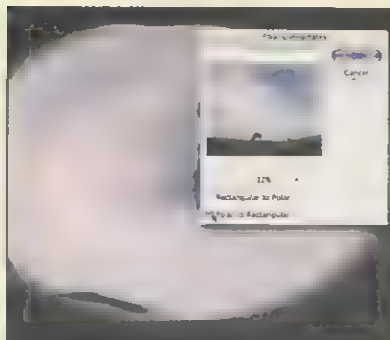


See the JPEG difference

Use the File > Save for Web method of creating JPEGs if you're worried about losing quality. You can even view four differently-optimised preview versions of an image by clicking the 4-Up tab, selecting a version and then changing the Presets. Zoom right in to see how these changes affect the details in the image.

Stretch one way then back again

Apply Filter > Distort > Polar Coordinates to a photo, set to 'Rectangular to Polar'. Now apply any filter that will render the image in a very different way, and repeat the Polar Coordinates filter, but set to 'Polar to Rectangular'. The 'middle' filter is applied in waves.



Dodge and burn midtones only

It's not really advisable to use the Dodge or Burn tools set to Highlights or Shadows in the options bar. Most of the time, the tool will just seem to paint grey all over your photo. Instead, use the Midtones setting, with the Exposure set accordingly.



Extra opacity

Sometimes you'll be using a layer to do a certain job – screen back a photo, or recolour it – and 100% opacity won't be enough. Duplicate the blending layer and tweak the new layer's opacity down if the effect is a little too strong. Also make sure that the layers are stacked next to each other.

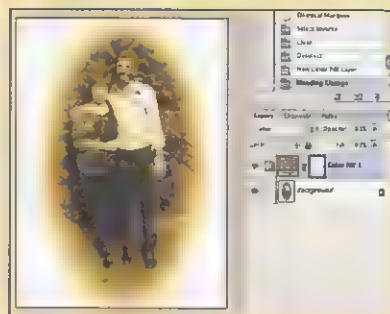
Bring sun-faded images back to life

If photographs are exposed to strong light for too long, they will fade. If you find that this has happened to a particularly cherished photo don't worry – you can repair it in Photoshop. Scan the image, then try the most obvious solutions first – add a Hue/Saturation adjustment layer, then select Image > Adjustments > Hue/Saturation and push the Master: Saturation up a little. Alternatively, duplicate the original layer and change the duplicate layer's blending mode to Multiply (which will help balance a newly improved contrast with the saturating effect) or Linear Burn (which does the same, but with stronger contrast).

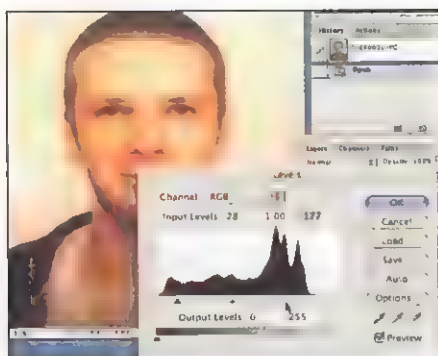
Quick sepia toning

First add a Hue/Saturation adjustment layer, and set Master Saturation to 0. Then add another adjustment layer, this time a Photo Filter layer – tick the Filter box and select Sepia from the menu. Set the Density quite high and also keep Luminosity ticked. This produces a easily-editable sepia effect fast.

An easy way of creating vignette-style framing



We've all seen them, those 'olde worlde' photos of people turned out in their Sunday best, posing for the camera in faded images printed in an elliptical frame. We can create this effect in Photoshop. First, select the Elliptical Marquee Tool and set Feather to around 50 pixels (depending on the size of your image). Set the Background Color to white. Draw a Marquee around the subject, then do Select > Inverse and hit [Delete] – that's the vignette shape sorted. Now add a Solid Color adjustment layer (choose a brown shade) and set that layer's blending mode to Color. Finally, to adjust that brown, double-click the adjustment layer and tweak to an undersaturated sepia tone, checking the preview as you go.

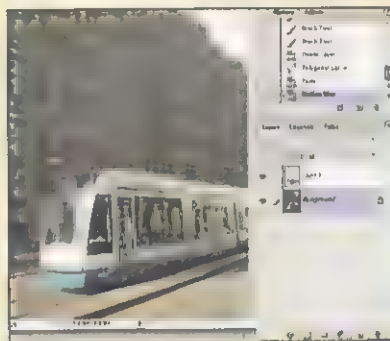


Correct 'grey' images using a Levels adjustment layer

Sometimes, photos will come out with the extreme whites and blacks far too close to the 'middle' greys. A Levels adjustment layer can be used to fix this. Push the Black slider up, so the original blacks are darkened, and likewise pull the White slider down, so the whites are lightened.

Add Motion Blur to suggest movement

Make a tight selection around the car/train/vehicle in your picture, then copy and paste it into a new layer. Then select the original background layer and do **Filter > Blur > Motion Blur**, ensuring that you set the direction according to the vehicle's direction of travel.

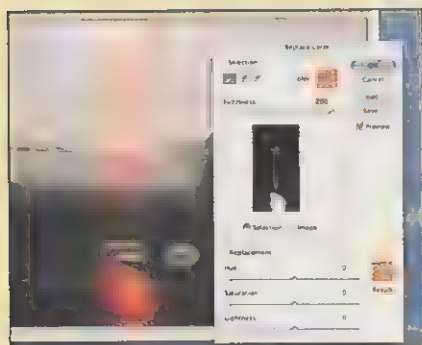


Use free web resources

The most obvious place to look for Photoshop help is the Adobe site, and more specifically its Studio site: <http://studio.adobe.com>. There you'll find other users and developers, tutorials, answers to questions, files, downloads and guides.

Clean up light leaks on printed photos

Light can affect digital cameras in funny ways, but point-and-shoot film cameras, especially cheap ones, have a nasty habit of allowing light to leak in



Use Replace Color to repair fiery light leaks in your photographs

through cracks in the casing. You might also make the mistake of checking to see if there's a film inside the camera and find that there is – and you're halfway through it!

In the example on the left you can see a light-damaged image. Use the Lasso Tool with a large Feather setting to select the problem area. Then do **Image > Adjustments > Replace Color**. Use the Eyedropper Tool to select the orange/red glow from the image. Select a Hue that's similar to the surrounding area, drop the Saturation and Brightness. Set the Fuzziness so that enough is selected, then hit OK. Repeat the process to remove as much of the damage as possible.



Small nose, big ears

Everyone likes to be flattered. If you're working on a photo of a friend, try to remember if they have any particular features they don't like – their big ears or small nose for example. To 'tweak' such features go to **Filter > Liquify** and use the Pucker, Bloat and Forward Warp Tools. Nothing too over the top, just enough to make a difference. Then show them the photo and see what they say...

Livening up dull, white skies with the Cloud filter



Use natural colours to paint

If you're using a paint tool to touch up or correct an image, use natural tones from other parts of the image. Using the Eyedropper Tool you can select sky shades, brick red from walls, natural grey tones from the floor and so on. This will ensure the colours you use aren't painfully saturated.

Many of the filters that we're often advised to avoid only get a bad press because most people don't know how to use them sensitively. Here's how to use the Cloud filter to brighten up white, dull skies. First, duplicate your image into a new layer, then create another empty layer and stack it underneath. Now use the Eyedropper Tool to sample a foreground colour from the darkest blue that you can find in the sky, and set the Background Color to white. Use the Paintbucket Tool to fill the empty layer with blue. Then select Filter > Render > Clouds. Finally, set the top image layer's blending mode to Multiply. If there are odd cloud shapes shining

through where there shouldn't be, brush white into the layer to clean this up, or do a Transform to warp the clouds around a little.



Use the Cloud filter carefully and it can brighten up your skies a treat



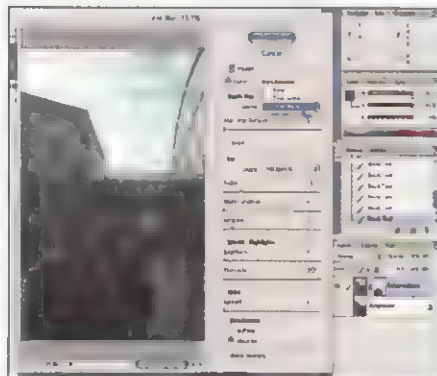
Reset the Color Sampler readout

The Color Sampler Tool (found grouped with the Eyedropper Tool) can be used to leave samplers on an image, and the colours are displayed in the Info palette. You can reposition the samplers by dragging them and, more importantly, you can set the sampler to display HSB, RGB, CMYK and so on by right-clicking (or [Control]-clicking for Mac users) on the sampler.

Adjust depth of field with Lens Blur

Photoshop CS features a new filter in the Blur family – Lens Blur. This can be used to apply 'depth of field' effects to your photographs, so that

only your foreground subject is in focus, and the less-important background features aren't. First, in your photo layer, add a layer mask and paint black into the mask to mask out the subject that you want to bring into focus. Then select the image thumbnail (not the mask thumbnail) and do Filter > Blur > Lens Blur. Set Depth Map > Source to Layer Mask so that the Mask is used to keep the subject in focus. Check the preview of the image so far, but don't touch anything else unless you really feel that you need to. The Iris > Radius setting is used to adjust the blur's strength.



You can use Photoshop CS's Lens Blur filter to simulate 'depth of field'

Creating panoramic photos? Why not try Photomerge...

If you've ever tried to join two adjacent compositions to create one image, you'll know just how tricky it can be to line them up, make sure everything fits, adjust the lighting



Users of Photoshop CS needn't struggle to create montages any more, thanks to Photomerge

and so on. In Photoshop CS, however, you can use the Photomerge feature to do all the hard work for you. Open all the relevant images first, and check that like elements such as skies, or other large landscape blocks, match in colour and lighting – you can match them up by screening back where necessary.

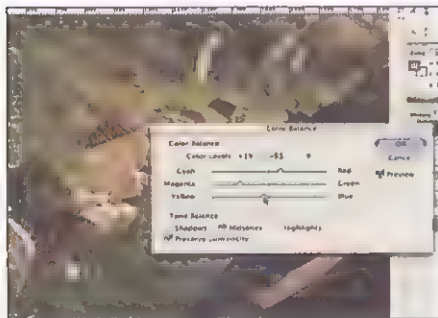
Then select File > Automate > Photomerge, and click OK when the images to use are listed. Now you can use the Move Tool to line up and overlay the photos. You can also Rotate them if necessary, or try out a Perspective Photomerge, in which you can set a vanishing point.



Quick curves

The Curves adjustment window can be a bit confusing, but it basically has two quick functions – to darken or lighten a photo.

To darken, click on the middle of the straight graph line, and drag straight down to form a concave curve. To lighten, drag upwards to form a convex one.



Adjust shadows, highlights or midtones

A Color Balance adjustment layer can be used to independently tweak the shadows, midtones and/or highlights in a layer. To 'warm-up' a cool colour cast (from a photo taken outside), move the sliders towards Red, Magenta and Yellow. To 'cool' a warm cast (for an internally-lit snap) go for Green, Blue and Cyan.

Flattening unsightly 'texturing' for high-impact portraits

Start by opening *jerome2.jpeg* from the disc. There's a lot of facial texture there that needs to be flattened. First, make a duplicate of the photo and select Filter > Noise > Media – set to 5 pixels. Note how the image is flatter, but still retains edge contrast, unlike if blurring, for example, was applied.

Now set the blending mode of this layer to Overlay, and note how it flattens large areas, while allowing details such as the eyes to shine through. Alternatively duplicate the new layer again, and set one layer to Screen at 50% opacity, and the other to Multiply, also at 50% opacity. This creates a similar effect, but without altering the contrast.



Experiment with unusual format cameras

You can buy a variety of odd little cameras, such as ones that take four pictures in a row, and others that are designed to allow light leaks. They're a little pricey, but can be a lot of fun.

Check out <http://shop.lomography.com/shop/>.

Chapter 3

SHORTCUTS TO SPEED UP YOUR DESIGN WORK

Photoshop can be used for all kinds of design jobs, from print, to web, to packaging design. If you're doing a lot of design work, the tips and hints in this chapter will be invaluable

Photoshop is used by all sorts of people for different things, and one area in which it's very popular is graphic design. It's not always the case that someone will create an entire design in Photoshop – in fact designing and outputting whole web pages in Photoshop is not a great idea at all, and applications such as QuarkXPress or Adobe InDesign are the favoured tools for print jobs featuring lots of text.

Making a mock-up

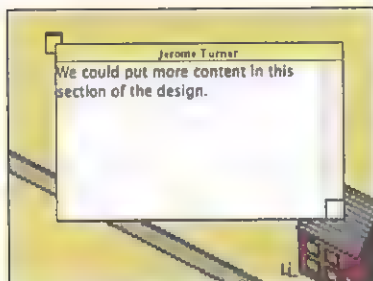
While we might not use Photoshop for entire design projects, it's great for bashing out general ideas and mock-up designs – both for clients

and for our own reference. Because Photoshop deals with raw pixels instead of vectors, it lends a 'painterly' quality to the design process, which can be very intuitive and perfect for creating rough ideas.

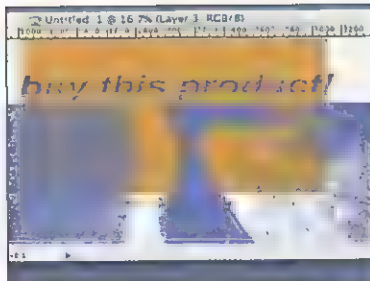
In this chapter we'll be looking at some of the features and tips that will keep your design work moving along fluidly. Everywhere you look in Photoshop there are new ways of using the layers, layer styles, palettes, masks or tools that make the most of the application.

A part of the whole

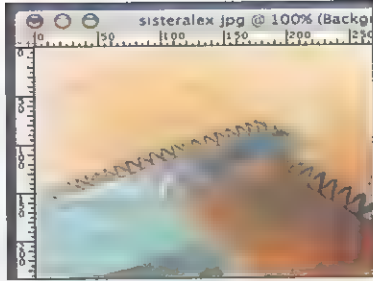
As well as using Photoshop for larger design projects, you can also



Page 51 Use the Notes tool to quickly annotate images



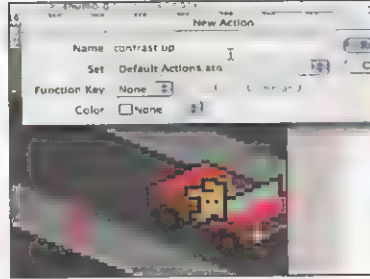
Page 54 Use Guides to create 'nets' for packaging design



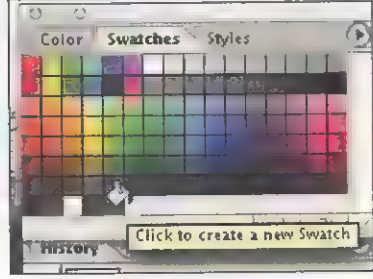
Page 57 Use extreme effects such as Invert to inspire creative ideas



Page 58 Use the Rectangular Marquee Tool to create block designs



Page 60 Create Photoshop Actions to automate repetitive tasks



Page 61 Create your own colour palettes for different projects

use it to create smaller graphics that are best produced in Photoshop before being used in another way, or with a different application. We'll look at some more tips for such jobs elsewhere in this Focus Guide, but in this chapter we'll see how to create elements such as 3D-style web buttons, icons for use in bigger designs, and captioned photos for web pages.

Remember the format

We'll also be considering various ideas that relate to the particular format you're outputting to. So, if you're printing off a design, what should you be thinking about? If the

work is going to be uploaded to a web page, is the text that you're using going to be legible on the background that you've chosen? And, of course, if you're working professionally, the client is a major consideration, so we'll be learning how various industry-standard colours and swatches are referred to, and seeing how to create simple presentations of work in progress.

Design work is, after all, basically just art with a particular brief. We're sure that once you've learned all these new practical tips, your clients will be extremely happy with the speed and finesse with which you can produce and show your work.

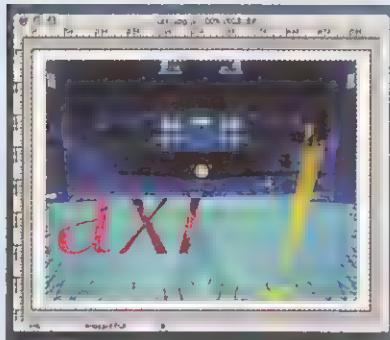


Help with tabulated designs

If you're creating a grid-style or tabulated design you may find it useful to turn on Photoshop's Grid, which is useful for lining up various elements. Select **View > Show > Grid**, and then, if you want selections and objects to snap to this grid, select **View > Snap To > Grid**. Also note the Grid settings in the **Edit > Preferences** menu.

Create a neat margin quickly

Do **[Control]+[A]** (**[Command]+[A]** on a Mac) to select the whole canvas, then do **Select > Transform Selection**. Now grab a corner handle of the selection and, holding **[Alt]+[Shift]**, push the corner in. Do **Select > Inverse** and hit **[Delete]** to create a 'cutaway' margin for your design.



Right-click on your canvas to locate hidden layers



Name your layers

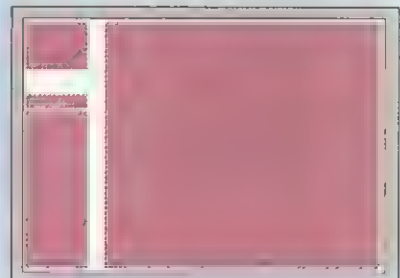
When your design only consists of two or three layers naming them might seem unnecessary, but it's a good idea to get into the habit. As your work builds up into multi-layered, complex designs, you'll appreciate knowing where various elements can be found. To rename a layer, double-click its name in the **Layers** palette and type the new name.

When you begin working with lots of different layers, things can become very messy very quickly. For example, you might have created a button for a web page and put it on the top of the image, but what layer did you create it in? Or perhaps you know that there's a particular photograph hidden somewhere in that pile of layers, but, short of turning all the layers off one by one and working your way through them, is there an easier way to find it? Yes, there is. Select the **Move Tool** and right-click (**[Control]-click** on a Mac) anywhere in the canvas – the list shows which layers lie directly under the mouse cursor, and you can select any layer from the list.

Try your design in a different colour

Whether you're putting together a website or poster design, here's a simple way to add a coloured tint. At the top of your layer stack, add a layer filled with a solid colour and set the blending mode to **Multiply**, **Hue** or **Color**, depending on how you want to tint it.

Create grid-style designs using the Rectangular Marquee Tool

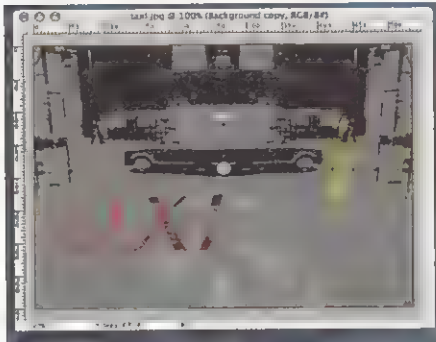


Grid layouts are popular in modern design work, and the **Rectangular Marquee Tool** is perfect for this kind of job, especially when we need to create various boxes to hold information in a web page.

Start with a white **Background** layer. Then, in a new layer, use the **Rectangular Marquee Tool** (**Feather 0 px**, **Anti-aliased** unticked) to draw a large marquee covering the outer bounds of the design. Then, in the tool options bar, tick the third in the row of four buttons – **Subtract from Selection** – and use the **Marquee Tool** again to 'chop out' a vertical section, creating two column selections. Continue like this, creating columns and rows where necessary, before selecting **Edit > Fill** to colour them in.

Dealing with gamut warnings before sending to print

If any colours in your design are too saturated, they may be unprintable, so if you send the image off to be printed 'as is', the printing process will select the nearest printable



The gamut warning shows problem areas in grey – this image needs some serious work!

colour. In most cases this isn't a huge problem, but, where accurate colour is an issue, you need to be more careful. First, check 'out-of-gamut' colours by selecting View > Gamut Warning and looking for any grey areas. Check your image is CMYK (Image > Mode > CMYK), as this tones down the colours for print. If you still see lots of grey, use the Sponge Tool set to Desaturate, or paint into a desaturating adjustment layer where necessary. Hopefully you will be able to make the necessary changes on screen, without having compromised the colours used in your work.



Tidy up with sets

When designing or creating mock-ups in Photoshop, you'll often have 'like' images in many layers – for example, a row of four button layers making up a web page navigation layout. At the bottom of the Layers palette, click Create a new set, then drag and drop each layer into the set. This allows you to close the set and organise your layers.



Finding a bright, primary-colours palette

If you want to use a bright, vibrant set of primary colours to colour a design, don't worry about mixing them up yourself. Open the Swatches palette, and from top-left to right you'll see RGB Red, Yellow, Green, Cyan, Blue and Magenta. On the next row down, the CMYK equivalents are shown.

Using Snapshots to make design decisions

If you've reached a certain point in a design and would like to save what you've done for later comparisons, create a snapshot in the History palette (click the camera button). For example, you might try a blue version of the design, then change some boxes around, then change it all again. You could make three snapshots, and then flick through them later on before you decide which version to use. Bear in mind, however, that snapshots only exist while you're editing – they're not saved at the end of your session with the file. However, when you're finished, you can right-click on a snapshot and select New Document to save a flattened version.



Lock layers

To move more than one layer at a time, select a first layer, then click in the box to the right of the eye icon in other layers, so the 'locked' chain icon shows. Now, if you use the Move Tool to move your layer around, all linked layers will follow.

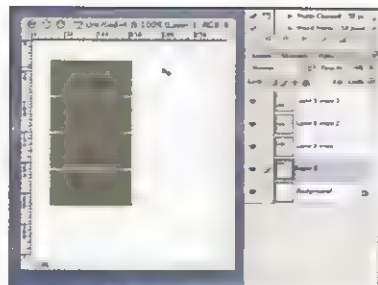
Creating website buttons

Layer styles can be used to add depth to your website navigation buttons – and fast



Move multiple layers with sets

If you place multiple layers in one set, this enables you to select the set in the Layers palette and then drag the whole set around in one go – very useful if you need to reposition a whole group of layers on the canvas.

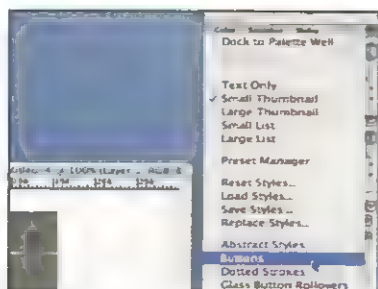


Start by opening a new file and, in a new layer, draw a rectangular selection for your first button. Then select **Edit > Fill > Foreground Color**. Duplicate the layer, select the Move Tool and, at 100% zoom, use the arrow key to shift the duplicate layer down. Duplicate this layer, and repeat until you have a vertical row of evenly-spaced buttons.

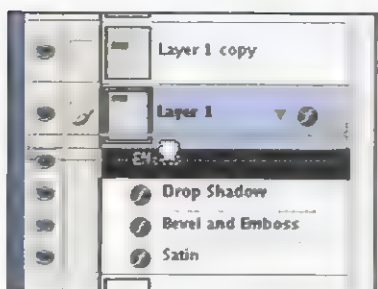


Re-stack layers with Arrange

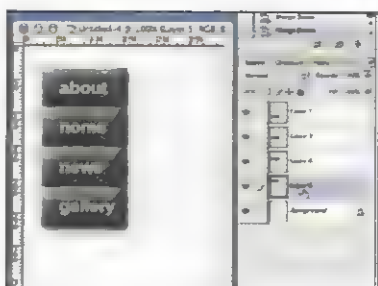
If you need to quickly move a Layer to the front of a project so you can work on it, select **Layer > Arrange > Bring To Front**. When you're dealing with a lot of layers this method can be easier than trying to drag and scroll up through the Layers palette. Note the other controls in Arrange too.



Select the first button layer and go to the Styles palette. From the drop-down menu select **Buttons**, and hit OK at the prompt. You'll see that the new styles have been loaded into the palette. If you hover the mouse over them, you can read their names.



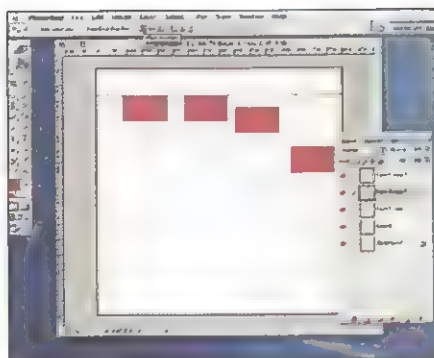
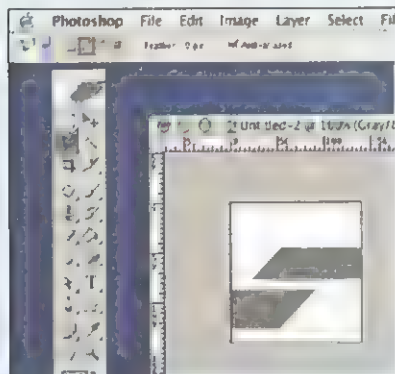
Select a style that provides 'flatness' on the top to add text. If you want to adjust anything, do so by double-clicking the thumbnail in the Layers palette. Now grab the word **Effects** below your first button layer, and drag and drop it on to another button layer – the same set of effects is applied.



Add a name for the first button, in a text layer just above it. Also add an empty layer just below the button layer. Do **Layers > Rasterize > All Layers**, and merge the button layer down into the empty one, then merge the text layer down into the button layer. Repeat this process for each button.

45-degree design is easy with Photoshop

There's a school of modern design that loves 45-degree angles. They're especially useful for rounding-off corners, or creating shapes that look sharp on the web. When using the Polygonal Lasso, hold down [Shift] to lock to 45 degrees.

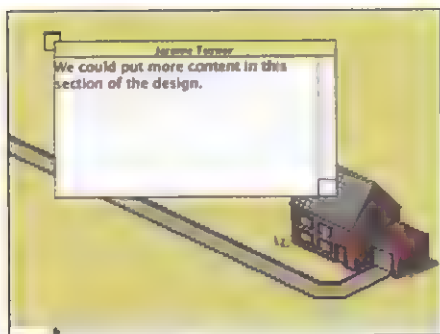


Aligning design elements

Aligning layers is easy. First, select the relevant layer, then make a Rectangular Marquee selection – select the whole layer to align centrally. Then select the Move Tool, and use the six Align buttons in the options bar. To align another layer, simply select it, and click the same Align buttons.

Creating flattened images from layers

You can create a brand new, flattened image from a multi-layered Photoshop document with just a few key presses. First press [Control]+[A] to select the whole image, then [Control]+[Shift]+[C] to Copy Merged (copy all the layers as if they were merged), then [Control]+[N] to create a new file. Finally, press [Control]+[V] to paste into the blank canvas. Use [Command] instead of [Control] on a Mac.



Pass notes from designer to designer

If more than one person is using your PSD file (for example, if you're exchanging ideas about a design with a client) you can annotate the file using the Notes Tool. Simply click on the canvas and then type. This note will then sit independently (not in a layer) on the image, and can be opened and closed as necessary.

Flatten a layer set so you can treat it as a layer

You can do various things to layers, such as adding vector masks, adding layer styles or adding adjustment layers via clipping groups, but only some of these options are available when you're working with layer sets. You can apply a vector mask (just select the set and click the Vector Mask button) but you can't add layer styles or adjustment layers. To get around this, select the layer set, then duplicate it (for safety) as usual, so that the whole set is copied. Then select [Control]+[E] ([Command]+[E] on a Mac), which usually Merges one layer down to the next, but in this case flattens the layer set, so that you can treat it as a single layer.



Use small GIFs online

Web download times can be kept down in two ways. First, you can use GIFs that contain few unique colours. If you select Save for Web and select GIF, you can see the colours making up the image – the less the better. Secondly, use GIFs repeatedly, as icons. For example, use the same arrow gif repeated on your page to stress certain points.

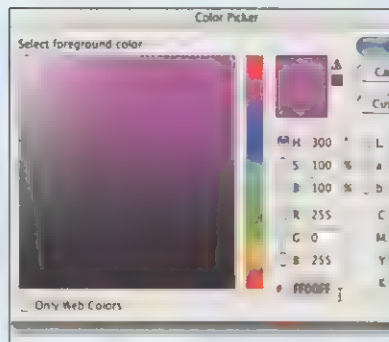


Add multiple layer styles

If you've added a layer style, you can add more styles to the same layer. Double-click the style in the Layers palette to open Layer Styles, then tick more boxes in the left list and set up each style as necessary. Also note the separate thumbnails in the palette – to hide all of them, untick the effect's eye icon.

Use hexadecimal values to refer to colours

You may hear people talking about 'hexadecimal' or HEX values for colours – the colour isn't actually different, it's just another way of describing it. You can find the HEX value of a colour at the bottom of the Toolbar's Color Picker, shown highlighted here.



If you are copying lots of text into a Photoshop file, don't forget to make a box for it to go in, like this. Otherwise, if you just select the Type Tool, click on the canvas and hit Type, it will run off the page!

Use Word to generate text

Typing a lot of text in Photoshop can be a little fiddly, so use Microsoft Word to generate the text first, then copy and paste the text into a Photoshop Type Tool box. If you're regularly working with large amounts of text you might want to use a dedicated DTP application.

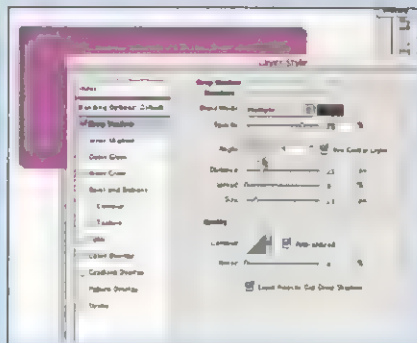


Save mixed colours for later

If you've spent ages mixing a colour to perfection, you can save it for use later. In the Swatches palette, with the colour selected as your Foreground Color, hover the cursor in the vacant space below the other colours until a paintbucket icon appears. Then click, and the colour will be added to the default swatches.

Add a Drop Shadow to pull an object out of the page

There are a variety of layer styles that can be applied to layers, giving a wide range of effects. Some of these are more useful than others, however.



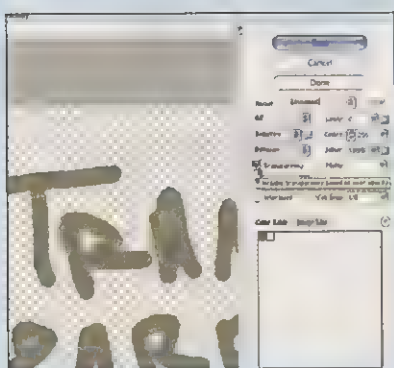
Use the Drop Shadow layer style to pull objects off the page, bringing them into focus

Draw an object in a new layer, then click the 'Add a layer style' button at the bottom of the Layers palette and choose Drop Shadow. You may find that Angle is the first thing you want to adjust. Distance affects the distance of the shadow from the object, pulling it further off the background. Spread and Size affect the shadow's density and size in comparison to the original object, while opacity changes the transparency of the shadow itself. As usual, don't adjust anything unless you need to. Click OK when you're happy with the effect, but don't forget that you can edit this later by double-clicking the layer's layer style name in the Layers palette.

Checking angles

You use the Measure Tool (grouped with the Eyedropper) by clicking and dragging out a straight line. On releasing the mouse button to form your second point, hold down the [Alt] key so you see the angle icon, then drag out another point to form the angle. You'll see the size of the angle in the Info palette.

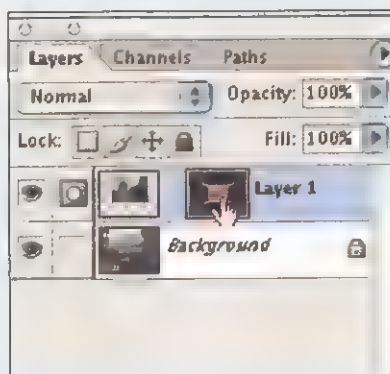
Designing transparent images for the web



You can create images which will appear with transparent backgrounds on the web – this can be useful if you don't know what the background colour of your HTML page will be. Open a new file and, in the New File window, set Background Contents to Transparent. Then create your image in one or more layers above the empty Background layer. Once you've finished do File > Save for Web and, on the right, select GIF as the file type – you can't save Transparent JPEGs. Tick the Transparency tick-box you see there and finally hit Save. Place the image in an HTML page and it floats happily over the background.

Temporarily turn off any layer mask

Masks can be turned on and off in the Layers palette for quick layer viewing. Hold the mouse over the Layer Mask thumbnail and [Shift]-click – the mask's effect is cut off and the thumbnail is crossed out. [Shift]-click to turn it on again.



Place images using the Paste Into command

Copying and pasting is a handy enough feature, but using the Paste Into feature enables you to insert an image into a design according to a mask. Try it out: First open an image and choose Select > All, then Edit > Copy. Now open a different image and, using the Rectangular Marquee Tool, make a selection that will act as your mask, and into which your copied image will be pasted. Then select Edit > Paste Into. Look at the Layers palette – you see how the mask works? Using the Move Tool you can now reposition the image within its mask (by selecting the image thumbnail) or move the mask itself (by selecting the mask thumbnail).



Sharpen small text

If you're writing small text, especially for the web, bear in mind that the sharper the edges of the text, the easier it will be to read, so set Anti-aliasing to None in the Type Tool options bar. Avoid using text that's very small though, as it will be difficult to read, anti-aliasing aside.



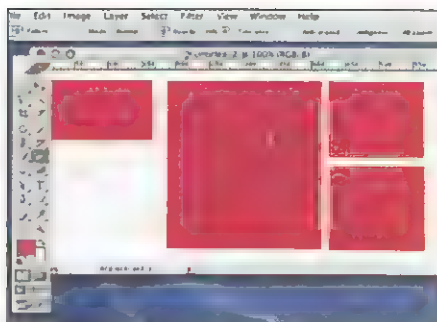
Up and Down button images

Draw a button and then pick the Bevel/Emboss layer style. Set it to Emboss and you'll see how that works. But here's the great bit – you can also make a 'pressed' version of the button. Duplicate the layer, making sure that the layer style duplicates as well, but in the Layer Style dialog, set the Direction to Down instead of Up.



Repeat GIFs for fast downloads

If you're designing a web page layout, why not use a GIF image as an icon, so it's repeated? The web page only has to load it up once, then you can repeat it as many times as you like without the download time increasing. GIFs with less colours will also load faster.

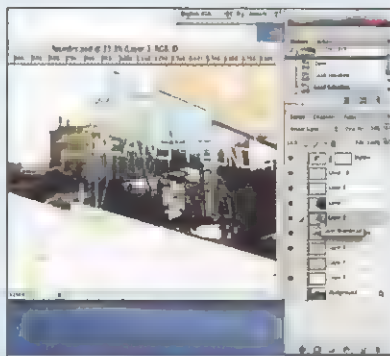


Re-colour similar shades in an image

If you untick the Contiguous option in any tool's options, that tool will affect all areas of the image within the specified colour range – with Continuous ticked, the tool will only affect pixels adjacent to where you click. So, if you're changing the colours of all background boxes in a design, untick Contiguous, as above.

[Control]-click to find layers

Have you lost a layer amid your jumble of creativity? [Control]-click (or [Command]-click on a Mac) on a layer's thumbnail in the Layers palette to select the content of that layer. If nothing else, this helps by showing the selection marquee around the layer's content, highlighting what's in the layer.

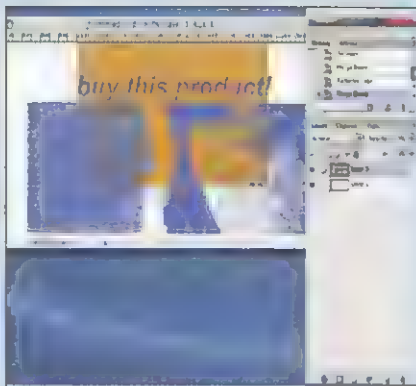


View and use industry standard swatches

If you're suddenly confused by your client's references to PANTONE Metallic Coated or Visibone don't worry, these are just particular swatches – colours arranged to make a palette. To load other swatches into your Color palette go to the Swatches palette's drop-down menu, select a swatch from the list and hit OK. To return to the defaults, select Reset Swatches from the menu.

Creating 'nets' for packaging design

You may not find yourself designing packaging very often, but if and when you do, you may need to design the



Nets can be made using Guides (shown here) on floating layers independent of the design

'net' that is cut and folded into the package, along with the graphics that will be printed on to it.

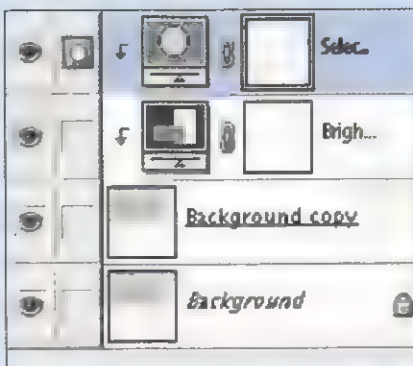
In Photoshop, activate the Guides and draw the net in a layer that sits on the top of the stack – use the Shape Tools. Then create your design in one or more of the lower layers – you can even create a design that bleeds over the edge of the net. Finally, when you come to print your design, you're free to turn off the net layer so that the design prints without this outline. If you're cutting it out yourself, you'll probably need to add minimal crop marks somewhere – perhaps using an erased copy of the net layer with just a few corner points left.

Apply adjustment layers to one layer

You may have an image containing many layers, but need to apply an adjustment layer to just one of them. If the layer in question is at the bottom of the stack, it's no problem – just place the adjustment layer in the next layer up.

However, if the layer you want to adjust is in the middle of the stack, you can't do this, as the adjustment layer will affect all the layers below it. Instead, add the adjustment layer as usual, then hold down [Alt] (you should see a new, linking icon) and click between the adjustment layer and the affected layer – this creates a clipping group, so the adjustment is only applied to the layer below.

You can also create a clipping group with more than one layer, so all those on top affect the bottom one.



Create clipping groups to apply adjustment layers to one layer at a time

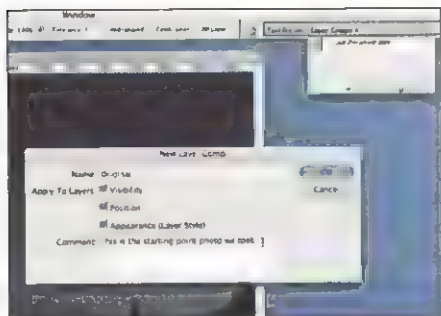


Toggle palettes

When you have a tool selected, check to the right of the main options bar to see if there's a toggle button – it looks like a file with a list on it. Clicking on this will bring up a new relevant palette; for example if you're using a brush tool, it brings up the Brushes palette.

Make a Layer Comps client presentation

Designers often create multiple compositions, or 'comps', of a page layout to show clients, and if you're using Photoshop CS you can take advantage of the new Layer Comps feature. Start with a multi-layered



You can add comments to your presentation using Photoshop CS's new Layer Comps feature

file, and create a design from a particular layer arrangement. Then, in the palette well at the top-right of the Photoshop interface, open the Layer Comps palette. Click the Create New Layer Comp button, name the comp and add any explanatory comments. Then rearrange or add to the layers and create another couple of comps. You can now access these at any time while the PSD file is open. Now do File > Scripts > Layer Comps to PDF, choose a Destination and hit Run. Then open the PDF that's been created – this is very useful for third parties who don't have Photoshop.



Layer Comps or Snapshots?

You might be wondering what the difference is between Layer Comps and taking Snapshots in the History palette. Snapshots can save all kinds of changes to your image, actually saving the History state, but only for that session. Layer Comps rely on new comps being made up of different layers, as it just hides and shows them.

Character and Paragraph palettes

You can format Type Tool content to great effect using these two palettes



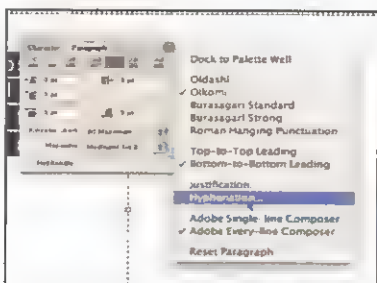
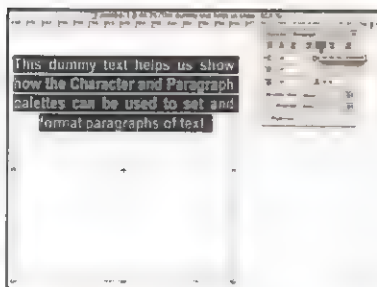
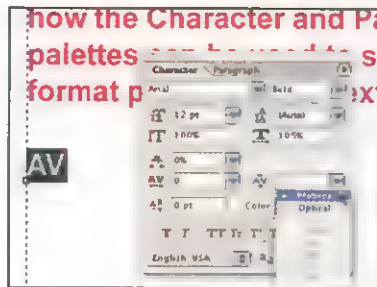
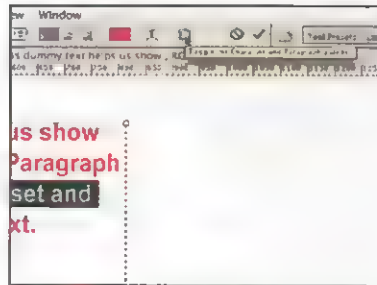
Change fields with sliders

Changing a setting by entering a number in a field using the keyboard can sometimes slow you down, but there's a shortcut: hold your mouse over the descriptive icon to the left of the field and a left/right arrow icon appears, allowing you to click and drag to change the setting.



Warp that text!

While adding text with the Type Tool, click the Warp Text toggle button in the options bar – it's on the right. Then pick a Style of warp and play around with the settings. This can be useful for text that needs to look lively and animated, such as a poster.



1 Start a new file and select the Type Tool. Then drag out a large marquee, and type some content – anything that will fill up the box you created. Then, in the options bar, click the button on the right to toggle the Character and Paragraph palettes.

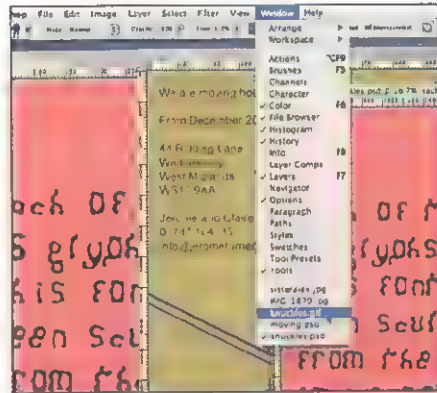
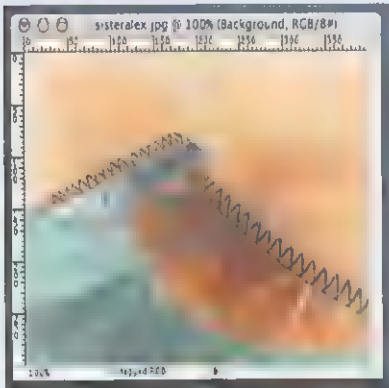
2 In the Character palette you can set options such as font, size and style. You can also vertically or horizontally scale text, or set the leading (vertical spacing between lines). Tracking sets the spacing between selected characters; kerning is similar, but is used to control overhang between two letters. The row of T buttons can be used to change the case of the text, and apply other styles.

3 The Paragraph palette sets how your text is arranged when placed in a paragraph marquee – as we've done here. The top row of buttons can be used to align the paragraph – to the left or right, centred or justified.

4 The other fields in the Paragraph palette allow for the setting of paragraph indents and margins. Note that both these palettes have their own fly-out menus, which can be used to set characteristics such as text styles and spacing (Character palette) or justification and hyphenation rules (Paragraph palette).

Invert colours for inspiration

Sometimes you may need to throw a few ideas around to inspire yourself creatively. Try using Image > Adjustments > Invert to invert all the colours in your layer – the result probably won't be exactly what you're after, but it might provide some food for thought.



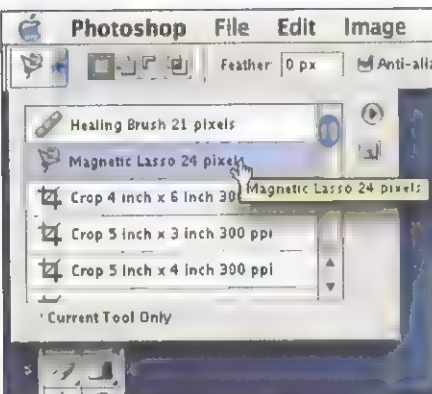
Pull your images from the pile

If you have a lot of images open on your desktop, you may find they're getting lost underneath each other; this often happens if you're creating a design with lots of compositing work. To bring a particular image to the front, open the Window menu and select the filename.



Artist's impression

To create the effect of a design that has been hand-drawn, but with a high-quality pen, try out some of the filters. Perhaps something from the Filter > Brush Strokes group, or Filter > Sketch > Graphic Pen. The image should still appear sharp, with decent contrast, but will look a little more hand-drawn.



Use default tool presets

If you're worried about the best way to set up a particular tool, check whether there's a default tool preset to start you off. The Tool Preset picker can be opened from the menu button at the top-left of the options bar, and contains presets for a variety of jobs – try them out.

Don't use Photoshop for whole web page designs

Photoshop is hugely versatile, but some jobs are beyond even its capabilities. For example, it wouldn't be advisable to design and output a whole web page in Photoshop, with the intention of that being your finished page. By all means use Photoshop to create mock-up designs of how the page might look online, perhaps exporting some elements that Photoshop is well-suited to creating, such as navigation buttons, or using Photoshop to create particular graphics for your site. However, if you make up an entire 'page' as one image file it will load slowly, it won't be interactive, and the text will probably be hard to read.



Match hue, saturation, or luminosity

Let's say you've created a website navigation button design, with five differently-coloured buttons on separate layers, but they don't seem to tie together. Add a new empty layer on top of the others, and fill it with a colour. Then try changing the layer's blending mode to Hue, Saturation, or Luminosity; this will apply the relevant value to all the buttons.

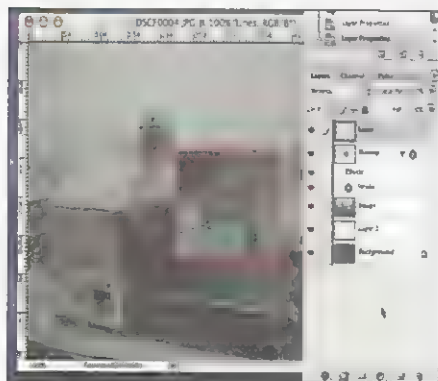
Create a 'zoomed detail' diagram



Caption your photos

Small text treatments in Photoshop are usually frowned on, but if you just need to caption a photo, perhaps for display on a website, it's OK. Start by adding white space to the bottom of your image, then type text into this – just a few words.

First, start with an image which should already be large enough to show the detail – we won't actually be 'blowing up' the detail, but rather



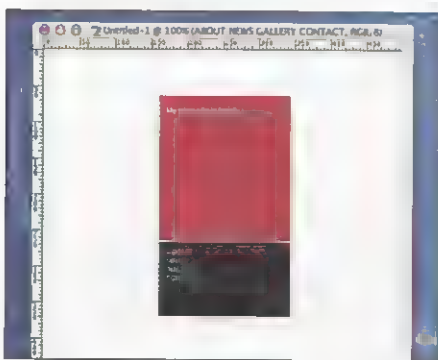
Use the Stroke layer style to create outlines showing the blow-up detail in the image

reducing the wider image. Draw a rectangular marquee around the detail that you want to highlight, then copy and paste this into a new layer called Outline. Add a Stroke layer style, then duplicate the layer, calling it Blowup. Merge the Outline layer down into the main image, leaving the Blowup layer on top. Duplicate the bottom layer, naming the duplicate Image, and add a white-filled layer beneath, and then use the Transform Tool to scale down the Image layer. Finally, in a new layer, use the Line Tool to draw two red lines to join the Blowup layer with the Image layer.



Think in 3D

Photoshop users often explain layers by saying that each layer is like a piece of acetate in a stack – and thinking in these 3D terms can be quite helpful. You can reinforce this idea by using 'depth-creating' layer styles such as Emboss and Dropped Shadow; see how much depth you can put into a design.



Line up blocks of colour

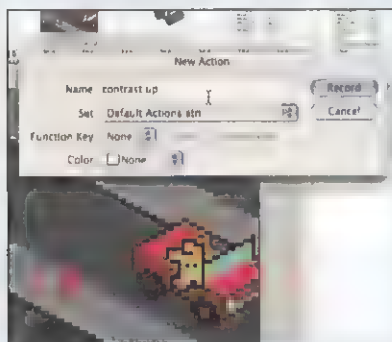
Many website designs rely on blocks of colour forming a column. Draw one filled box shape, then duplicate the layer, and use the Paintbucket Tool to re-colour and vertically Transform it if necessary. Then use the up and down arrow keys to reposition it. At 100% zoom you can see the pixels quite clearly.

Try out various Photoshop patterns

Sometimes a flat background just doesn't do enough for your design, so why not try out some patterns? There are plenty of Photoshop default patterns that you can make use of, and you may already have come across them if you've ever used **Edit > Fill** and then selected **Pattern** instead of a colour. But, while selecting your pattern from the **Custom Pattern** menu, did you ever notice the arrowhead menu button there? It's easily missed, but click on it and the drop-down menu that appears enables you to load in a variety of different Photoshop pattern groups. Simply hit **OK** when prompted and the patterns will then appear in the **Custom Pattern** menu.

Back small icons or logos against another shape

In a new layer, draw a perfect circle, then [Control]-click ([Command]-click on a Mac) the layer's thumbnail so that it's selected. Then select your icon layer and, with the Move Tool selected, use the alignment buttons in the options bar so the icon is centred inside the circle.



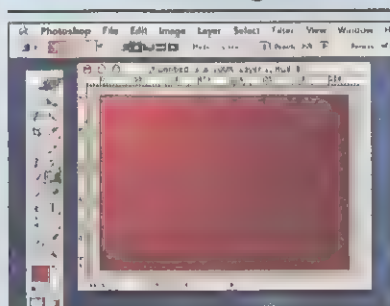
Create your own patterns for design work

As well as using the groups of patterns that come bundled with Photoshop, you can also create your own. You may find making patterns a little impractical for creating pixel-perfect, small tiles for website patterning (ImageReady can do this a lot better); it's perhaps more suited to print work, such as designing your own wrapping paper, for example. First create your design, then make a rectangular selection from it, keeping in mind that all visible layers will be part of the flattened pattern tile. Then select Edit > Define Pattern, and the next time you select Fill > Pattern your new pattern will appear at the bottom of the Custom list.

Use easy-on-the-eye colouring for text...

...Or, in fact, anywhere. But text specifically has to be read, and on the web you can't expect people to hang around if they can't read something. So that means dark text on a light background, or vice-versa. Avoid text on patterns if possible, and avoid highly-saturated colours.

Add dimension to large, flat spaces in minimalist designs



You'll often find that you want to create large, flat areas of colour, so as to draw attention to the details in your design. However, if you're uncomfortable with all that 'empty' space in your image, you could add a subtle gradient to make things more interesting. Create a foreground colour by selecting the original flat colour using the Eyedropper Tool, and then adjusting it slightly using the Color Picker. Then select the Gradient Tool (found grouped with the Paintbucket Tool) and, in the left of the options bar, set the gradient type to Foreground to Transparent. Then draw your gradient on to that flat colour layer. The gradient will blend in the current foreground colour over the original flat colour.



Line up layers using edge snapping

Take advantage of the fact that objects snap to the edge of the canvas – drag one layer so that the left edge snaps to the edge, then select any other layers that you want to line up with it and do the same. Then lock them all together by clicking the 'link' icons in the Layer palette, and reposition them as necessary.



Create quick outlines

Make a selection that runs exactly around the edge of an object in a layer, then do Select > Modify > Expand. Enter a number of pixels for your outline. Then, in a new layer beneath the last one, fill the outline with a colour, thus creating a backing and bold outline for the object.

Actions and Automate

Use these features to save time when applying the same effects to a number of images



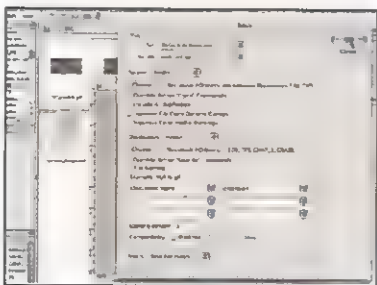
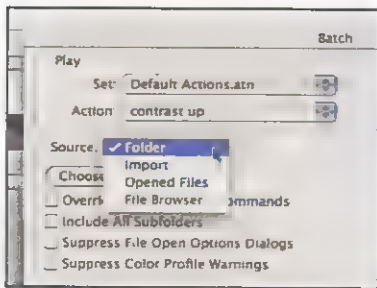
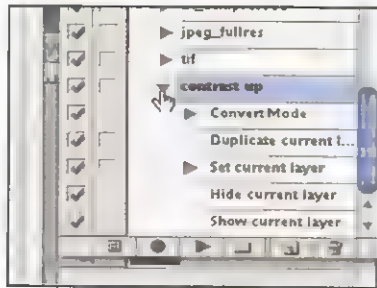
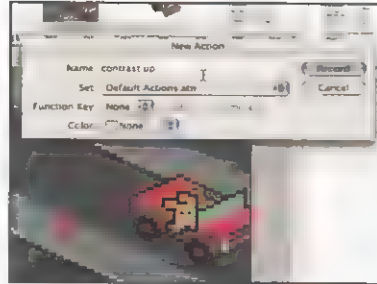
Rotate images in the File Browser

If you're using the File Browser, and are getting annoyed by images that are rotated 90 degrees, use the rotation buttons in the top row of buttons to correct them there. Then, if you open the images from the browser, you'll see that they open the right way up.



Change Global Light

When applying layer styles, you may have noticed a setting which enables you to apply shadows according to the Global Light, so that all layers and objects use the same light source. This is a virtual Photoshop light source which can be set at any time. Select Layer > Layer Style > Global Light, then set the Angle and Latitude of the lighting.



Let's assume that you have a group of images that will all need the same treatment, for example a set of photos that all need brightening in the same way, or designs that all need colouring. Start by opening one of the files. Then go to the Actions palette and hit the Create New Action button. Name the action and click Record.



The Record button lights in the Actions palette, so now make all your changes. In this example we've duplicated the layer, and applied an Overlay blending mode so that the contrast is increased all over. When all the changes have been made, hit the Stop (square) button in the Actions palette. Your Action is shown and, if you click on the arrow, each step will be listed.



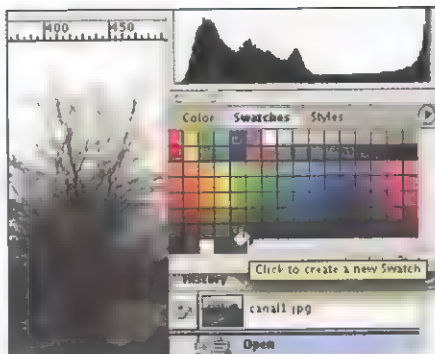
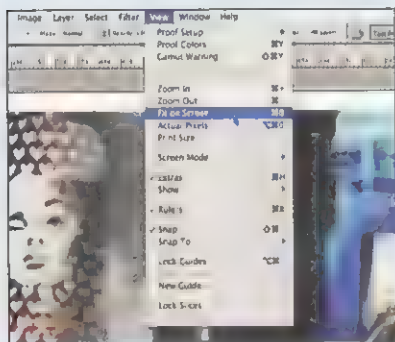
Now to automatically apply the same changes to a whole folder of images. Select File > Automate > Batch and the Batch window opens. Make sure that your new action is selected at the top, and, in Source, select Folder, and click Choose to browse to your folder of original images.



In Destination, also select Folder, and hit Choose – if you don't yet have a folder for the new versions of your images, select Create Folder. Then hit OK and leave Photoshop to do all the hard work, making sure not to interrupt it by using other applications at the same time.

View your design as large as possible

If you're having trouble getting a clear idea of what your design looks like (maybe you're zoomed right in, or looking at an odd part of it), then do **View > Fit on Screen**. Photoshop will change the canvas so that it fits snugly round your image, and zoom in so the image fills the work area.

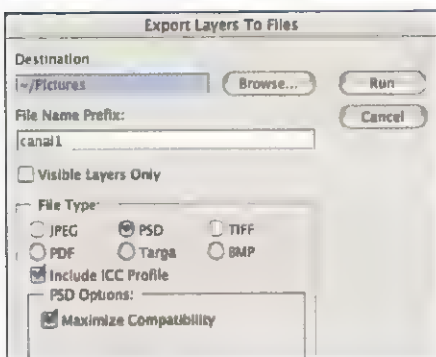


Create colour swatches from your photos

First pick a photo to sample your colours from. Use the Eyedropper Tool to select a colour then, in the Swatches palette, click in the vacant area at the bottom to add the colour. Repeat, sampling from different parts of the image, until you have a palette of several 'real' colours.

Make a selection around layer contents

To select around the existing contents of a layer, first do **[Control]+[A]** (**[Command]+[A]**) to select the whole canvas. Then select the Move Tool and drag the layer a little and release it; we're not interested in moving the layer but, as you let go, notice how the selection adjusts to confine itself to the layer contents.



Export layers to files

This is useful if you're trying to send one layer of an image to someone, or perhaps send them the whole image as separate layers which they will then 'jigsaw' back together again. Select **File > Scripts > Export Layers to Files**, browse to find a suitable folder to save the files to, and choose a file type.

Cut up and paste for a fractured effect

We use Copy and Paste all the time, but what kind of fun can we have if we try using Cut instead? Well, we can produce some very interesting 'broken glass' effects. Start with a design in one, floating layer – that is with no surrounding 'background' in the layer. Then use the Polygonal Lasso Tool to make a random selection. Press **[Control]+[X]** (**[Command]+[X]** on a Mac) to cut, followed by **[Control]+[V]** to copy this section into a new layer. Reposition the selection so that it's out of sync with the original shape, then merge the layers down. Repeat this process as much as you like, cutting and pasting shard shapes from your image so that it becomes totally fractured.



Layer Comps warning triangle

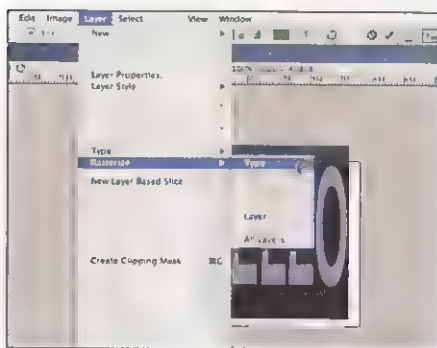
If you're using the Layer Comps palette in Photoshop CS and see yellow triangles appear next to your comps, you're in trouble. It means that you've deleted a layer that was used in that particular comp. If you're not too bothered about losing the comp, delete it. Alternatively, select **File > Undo**, or use the History palette to return the project to an earlier 'state', before the layer was deleted.

Rasterise your text first, then apply filters



Deleting troublesome paths

We use the Shape or Pen Tools to draw paths for masks, but how do we delete them? They don't exist in their own layer, and can sometimes seem a bit abstract and unreachable. Open the Paths palette – it's usually grouped with the Layers and Channels palettes. Select the offending Path and simply drag it into the trashcan.



Want to apply a filter to your text? You'll need to rasterise it first

is useful in one way, because it means that the text is still editable later on, but it's a pain if you want to do anything more creative. Actually, you can still do quite a lot to text without rasterising it – including transforming and warping – but you can't apply filters.

To rasterise the text, select the Type layer and choose **Layer > Rasterize > Type**. Now you can blur the text, or render the text using one of the Sketch or Art filters as you please, because the text has been converted into pixels, just like any other Photoshop bitmap – it's effectively become an image.



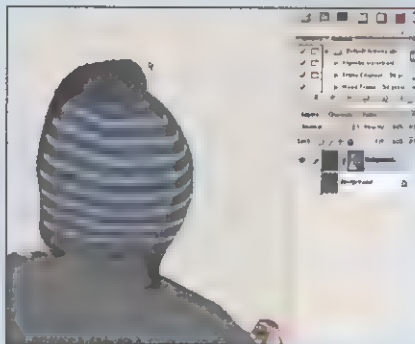
Try out Text Effects

If you're creating text for headings, buttons or anything else that's relatively large, why not try applying a style? Select your text on the canvas, then go to the Styles palette and open the drop-down menu, and choose **Text Effects** or **Text Effects 2** from the list.

Create an adjustable vector mask using paths

First, create a selection that basically outlines a particular object – don't worry about being too neat. Then open the Paths palette and, at the bottom, click the 'Make work path from selection' button. You'll see your selection transformed and shown as a Path – select it. In the Layers palette, duplicate the Background layer from your image and select the duplicate. Then select **Layers > Add Vector Mask > Current Path**. The duplicate layer is now masked by the Path (turn off the Background layer to see this). Select the mask thumbnail; it can then be reshaped using the Direct Selection Tool (select a point first, then drag) and the Convert Point Tool (for

converting corners to curves and vice-versa). You can use the Selection Tool and other Pen tools to add and remove points, or move the mask.



You can create a reshapable vector mask around an image in the form of a path

Add music to Photoshop files

If you're designing a web page mock-up and want to supply a suitable music track or audio narration, add it with the Audio Annotation Tool, which you'll find grouped with the Notes Tool. Select the tool and click on the canvas, then hit Start to start recording. Click the icon to play back the sound for future reference.



Draw paths using the Shape tools

The Shape tools can be applied in a number of different ways. Select the Rectangle Tool, for example, and look at the three buttons in the left of the tool options bar. Selecting 'Shape layers' enables you to draw a filled shape that can be later edited as a vector; 'Fill pixels' draws a bitmap shape – this can't be edited. The middle button is useful, as it enables us to draw a Path, and, if you look at the row of buttons to the right, these Paths can take on many forms, such as rectangles, circles and regular polygons. Click the Custom Shape Tool, then select from the new menu that appears just to the right – you've got plenty more custom shapes at your fingertips.

Draw arrows for diagrams

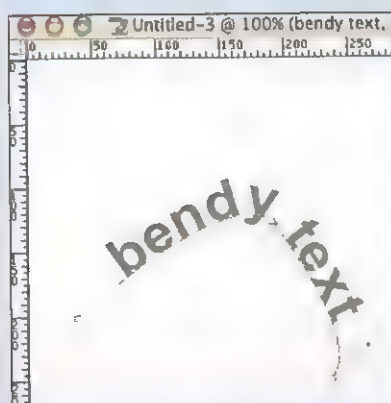
Select the Line Tool from the Shape Tools group. In the options bar, choose 'Fill pixels', then click the middle of the three blue menu buttons to display the Arrowheads options. Click Start and End for double-ended arrowheads; the other settings define the width, length and concavity of the arrowheads.



Combine 'real' and digital images

If you think your Photoshop design looks too 'digital' and computer-generated, try importing some photography and seeing what effect it has. It may be that you need to apply a filter to the photo, for it to blend in with your design, but it may help create a more natural feel.

Type text along a path in Photoshop CS



First draw your work path – a line for the text to follow. Select the Pen Tool and, in the options bar, select Path. Click the first point on the canvas, then click the second point and, with the mouse button held down, drag to bend the line. Add more points to the path, then select the Type Tool and hover the mouse over the path until the icon changes to show a bendy line in it, then click and start typing.

The text should now follow the line, and you can still reshape the path as necessary, using the Pen and Selection tools. Once you've finished making your path edits, the text will adjust itself too.



What are Styles?

Draw a shape in a layer, and then apply a style from the Styles palette – what exactly is it doing? Well, if you now check the layer in the Layers palette, you'll see: Styles are just combinations of layer styles that have been preset in a particular way – which means that you can create your own tool

Chapter 4

BRUSH UP ON YOUR DRAWING AND PAINTING

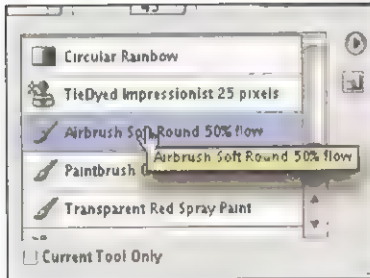
Photoshop is the perfect tool for digital artists – it's flexible, fast and easy to use. But what if we could show you even more effective ways to create artworks? Well we can...

Photoshop is not the perfect tool for creating illustrations. In fact there are probably illustrators out there who very rarely use it, preferring to work with vector applications which allow them to draw shapes, lines, and so on which can then be edited. Generally speaking, Photoshop is bitmap software, so we work with pixels rather than vectors – in more recent versions of Photoshop improved vector masking support has been introduced, but the software still doesn't compete with Illustrator or FreeHand – then again, it's not supposed to. However, people do prefer creating painted artwork with

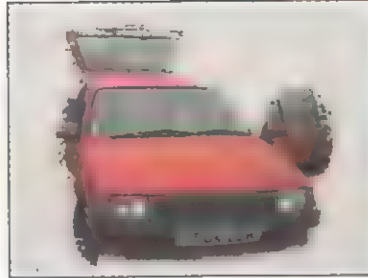
Photoshop, and after reading this chapter you might see why.

Pixel-packing

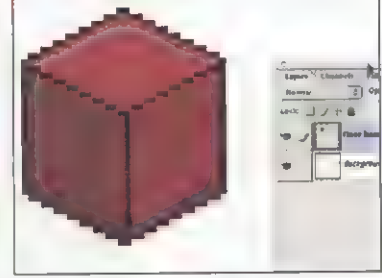
Working with pixels can be quite awe-inspiring. Each layer in your Photoshop file is made up of thousands of separate pieces of information, represented as coloured squares arranged in a grid formation. You can edit each of those pixels separately (although doing this one pixel at a time might drive you a bit mad!). This makes Photoshop perfect for realistic 'hand' painting, and the flexibility of the various Brush settings allows for some wonderfully creative



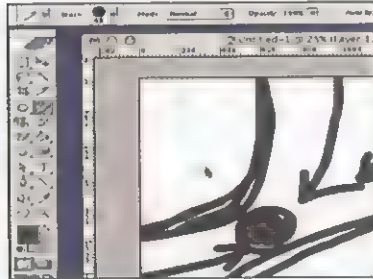
Page 67 Use Tool Presets to speed up everyday drawing and painting jobs



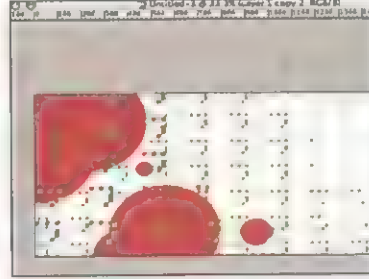
Page 68 Use the Extract filter to isolate objects with messy edges



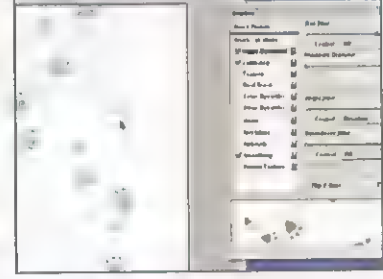
Page 70 Learn how to create isometric pixel art with the Pencil Tool



Page 72 Use the Pencil Tool in an empty layer to create rough sketches



Page 75 Use patterns to imply a sense of distance in your works



Page 77 Splatter an image with icons using random Brush settings

results, as we'll see. And, once we start zooming right into an image, working with pixels on an individual basis in the form of 'pixel art', the results can be very stylish.

And there's more

Once we start putting filters, layer styles, blending modes and other features into the equation, there really is no limit to what we can do. We'll see in the next chapter how vector graphics can be prepared using software such as Illustrator and then imported into Photoshop, but this is often not necessary – we can often produce truly unique artworks using Photoshop alone.

And, whatever you say about vector software, it can never work with photographs (which are often used as sources for artwork) as well as Photoshop; this is another advantage of bitmap images.

Get creative

Along with all the usual shortcuts for your everyday drawing jobs, and tips to make projects run more smoothly and quickly, we'll also be looking at some real-life creative mini-projects, such as using the Brush Tool to create 'splatter' effects. We'll also look at the effect that repeating patterns have in an image, and how they can best be used.

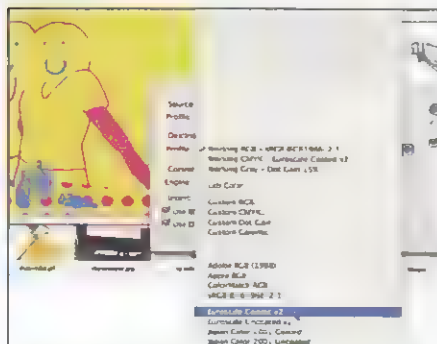
Submitting work for print – a checklist



Instant inspiration

Go to www.images.google.com, type any word into the search field and you'll find all sorts of interesting images to fire your imagination. This can be especially useful if you have to produce an editorial illustration for a magazine article – just enter some keywords to describe what the article's about, and the resulting images should give you some ideas to start working with.

If you're submitting an image to a third party so that they can print it, there are a few things you need to check first. Firstly, if you've been working on the file in RGB mode,



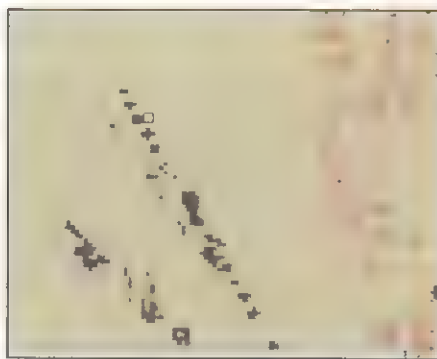
There are a few things you need to check before sending your artwork off for printing

which is most likely, select Image > Mode CMYK, as printers print using Cyan, Magenta, Yellow and Black (K). Secondly, select Image > Adjustments > Convert to Profile, and select one of the colour profiles from the group that starts with Euro Coated – choose the relevant country. Thirdly, tweak the image's lighting and colouring, as these may have been altered by the previous steps. Next, select Image > Image Size and, in the window, untick Resample and change Resolution to 300 pixels/inch. Finally, if a TIFF file is required (best for printing), select File > Save As and select TIFF.



Merge on finishing

When you've finished working on an illustration, you'll probably have a lot of layers, some visible which you want to use and others which you don't need. You don't have to delete them though – when you select Layer > Flatten Image this will dump the invisible layers, and merge everything else into one layer.



Remove rogue pixels with the help of a coloured layer

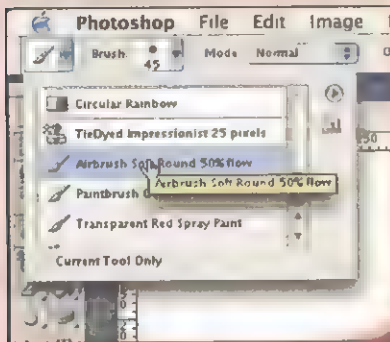
Sometimes pixels can go astray, so if you're trying to erase and clean up a layer but can't see its contents too clearly, try placing a layer containing a flat, contrasting colour below. For example, if you're working on a very light layer, place a black-filled layer beneath, and vice-versa.

Printing pixel art so that you can still see the pixels

When creating pixel art (very detailed images that are drawn pixel-by-pixel) on screen, we can see the individual pixels quite clearly. As screens display images at 72 pixels per inch, and most printers print at 300 dots per inch, this means that we have to multiply the image by four to make sure that it's still clean, sharp pixel art. Select Image > Image Size, and, in the dialogue, untick Resample Image and change Resolution to 300 pixels/inch. Then tick Resample Image again and change the Pixel Dimensions Width and Height to 400 percent. As long as you end up with a 300dpi image, you're fine.

Use the Graffiti Brush preset

Looking to do some graffiti work? The Brush Tool can be set up in various complicated ways to achieve this – or you could just use a default preset. Open the Tool Preset picker from the options bar and select Transparent Red Spray or Airbrush Soft Round.



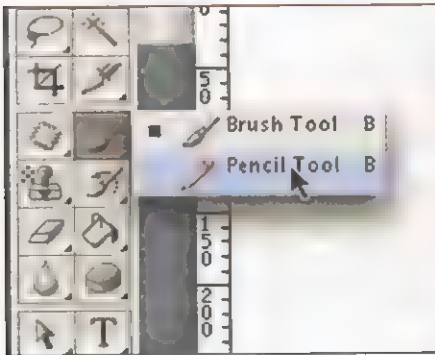
Create a frosted glass effect using a Gaussian Blur

Start with a photo of the scene we will be viewing through our 'frosted window'. Then duplicate the layer, and apply a Gaussian Blur to this top layer with just a few pixels of blur. Then mask any areas where you don't want the glass to appear, so that you see the scene clearly.



Delete useless layers

If you get to the end of a session working on a multi-layered illustration, you might want to delete any hidden layers that you don't need. Select Layer > Delete > Hidden Layers; this will make your PSD file much smaller, which is helpful if you need to email or upload it later.



The difference between the Pencil and Brush

You can set Width and Brush Type for both, so what's the difference? Well, the Pencil is aliased, and the Brush is anti-aliased, which means the latter paints semi-transparent pixels if set up with a soft edge. This is why users tend to use the Pencil with a narrow width setting for detailed work.

Create 'scissor cut' collages using the Polygonal Lasso Tool

We've all done it – flicked through magazines, cutting out images and then sticking them on to a piece of paper to create a collage. Okay, so the last time you did this you may have been around seven years old, but you can recapture your youth in Photoshop! Open a photograph, then use the Polygonal Lasso Tool to create a jagged, rough selection around your subject. Then press [Control]+[C] ([Command]+[C] on a Mac) to copy, before pasting into a blank working canvas. Build up the canvas with more cut-out imagery like this until you've covered the page, then use the Move Tool to fine-tune your composition.



Feathered or hard edges?

When should you feather the edge of a selection, and when shouldn't you? Well, if one image needs to blend over or into another, or you're going for a soft, comfortable feel to the image, add some feathering (or set Feather in the options bar before selecting). If you're after a really hard edge, set Feather to 0 and untick Anti-aliasing.

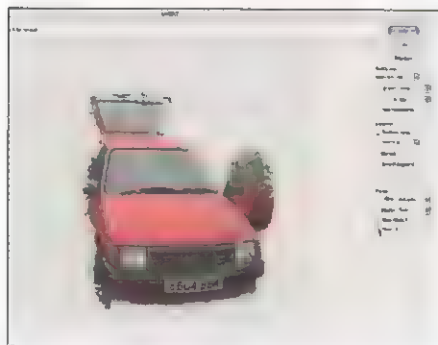
Use Extract to cut out rough-edged objects from backgrounds



Pen and tablet

Companies such as Wacom (www.wacom.com) produce 'pen and tablet' hardware which enable you to draw just as you would with a pen or pencil; a must-have for any Photoshop artist looking for that hand-sketched feel.

Bear in mind that this process can be a little fiddly, and won't always produce perfect results, but with a little practice, who knows? Start off with a photograph containing a



Hmm, not exactly the effect I was after, but a little fine-tuning will put things right

subject that you want to remove from its background and paste into an illustration.

Select **Filter > Extract**. In the pop-up Extract window, first use the Highlighter, which is selected by default, to carefully draw around the outline of the object – the tighter the Brush Size the better. Then select the Fill Tool, and click inside the closed shape. Now click Preview to see a preview of your cut-out – it will probably be awful, with bits chopped off all over the place. If this is the case, in the Preview section, change Show from Extracted to Original, and try again.



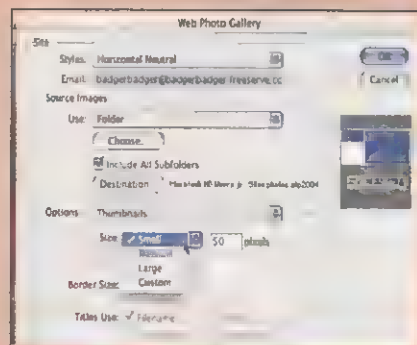
'Electro-clash' colours

The Eighties have been enjoying something of a revival in fashion and music recently, and this has inevitably had an impact on the design world. Use deeply saturated, bright primary colours for full eye-hurting impact, or try creating an illustration using black and white, and painting focal points with lurid neon-pink.

Make a quick, simple portfolio website

Yes, Photoshop can even be used to create websites – to an extent. First, prepare a source folder full of all your images – it doesn't matter if they're all different sizes. Then select **File > Automate > Web Photo Gallery**. In the pop-up, choose a Style for you gallery – you can see how it will look in the preview on the right. Browse to your source folder of images by hitting Choose, and also select a Destination. Then go through each section in the Options – note how you can resize the Large Images and also specify dimensions for the Thumbnails. Experiment with the various options so that you can see how different settings affect the site design. Once

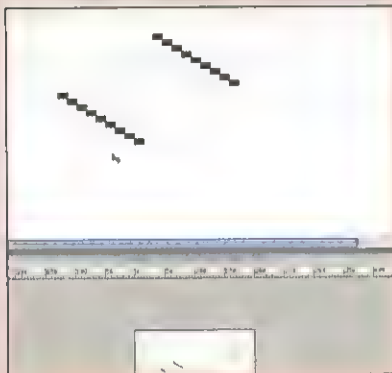
it's output to your destination folder, you need to put the whole folder online to view your site. Then tell all your potential illustration clients!



Use the Web Photo Gallery feature to put together a simple portfolio website

Use layers to create 'template' projects

If you're creating a card or flyer design, you may want to use a similar design in the future, but slightly alter the wording or illustration. So save your file with a name like 'card_template.psd' and store it in a safe place.



Talk to your clients to make sure that your work is reproduced correctly

If you're producing an illustration for a client, communicate with them regularly to make sure that your work is seen in its best light. For example, make sure you know the exact dimensions that the image should be, and whether this includes a bleed which will be cropped off, or whether this is something that you'll need to add to the dimensions. Ask the client how much bleed you need to add – obviously this only applies if you're illustrating right up to the page edges. Also check what file type and colour profile they would like assigned to the image – you may need to speak to a print technician to find this out.

Need to halve a page? Easy...

If you're creating a birthday card or a magazine illustration, and want to know the halfway mark of your working space, check that View > Rulers is ticked, then click and drag a guide from the ruler at the side or top of the page to around the middle of your image – it will 'snap' to the centre point.



Draw a 'freehand' straight line

To draw a straight, fine line select the Pencil Tool and set it to 1 pixel (or larger if you like). Then hold down [Shift] and start drawing either vertically or horizontally. If you want to change the angle of the line select Edit > Free Transform and grab the 'corner' handle of the layer to rotate it.

Add colour to scanned pencil sketches



First scan your image and open it in Photoshop. We need to extract the sketch in one transparent layer, so add a Brightness/Contrast adjustment layer so that the image is more or less 'black and white'. Then do Select > Color Range and Select > Shadows (or if the sketch still isn't properly selected, do Select > Sampled Colors and use the Eyedropper Tool to sample an area of the sketch). Then hit OK and the sketch should be selected.

Now select Copy and then Paste, so that the sketch alone is copied into a new layer, and add a white layer just below. You can now use a soft-edged, large Brush to paint in more layers between the white and sketch layers.



Remember art lessons

The first lessons you learned in art school are the most useful, as long as you can remember enough from them! Use complimentary colours – red 'goes' with green, orange with blue. Try different colour swatches against each other, so you can decide what works best for your particular project.

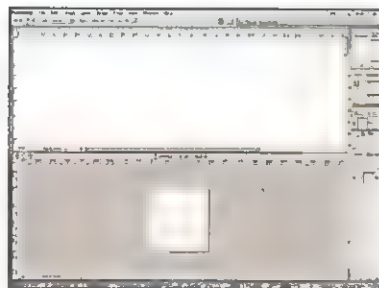
Create an isometric 3D house

We've all seen pixel art, but what are the top tips for putting it together quickly and neatly?

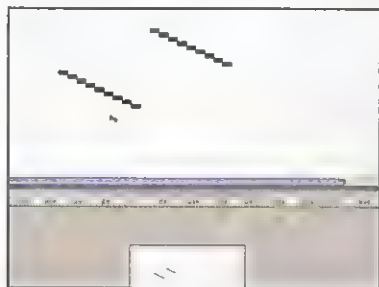


Realistic airbrush

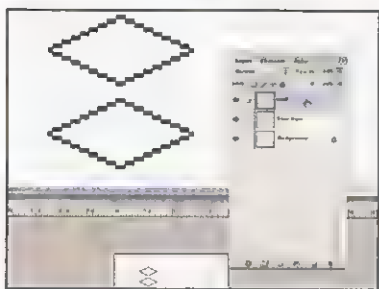
When you select the airbrush settings, any Brush you use will 'pool' paint under the brush if you hold it in one place – this is great for realistic spray-painting effects. You can find the button in the options bar, or in the Brushes palette.



1 Start with a new 72 pixels/inch RGB file, around 200x200 pixels. Select the Pencil Tool, set to 1 pixel in width, and zoom in to around 800%. Also select Window > Arrange > New Window For..., make sure it's 100% zoomed, then select Window > Arrange > Tiled.



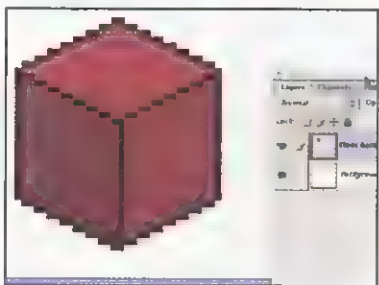
2 Select the 800% zoomed window. In a new layer, start with a line for the left wall of our house, two pixels along for every one up, i.e. isometric style. Then duplicate the layer, and use the arrow keys to move this copy. Hit [right] twice, then [up] once, [right] twice, [up] once, and so on, until it's roughly in place as shown.



Use selections as masks

We know that making a selection before using tools such as Brush will stop you from painting into certain parts of the image – you're basically creating a mask. Try making a selection with a Feathered edge, then painting inside. Notice how the feathering fades out the paint at the edges, almost as if you're holding a cardboard cut-out just off the paper's surface.

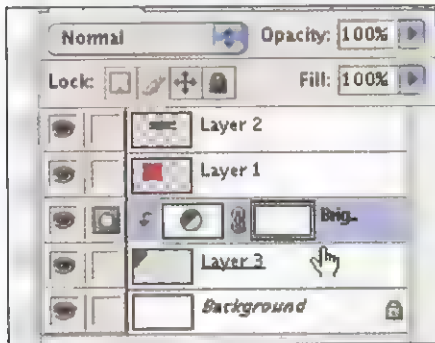
3 Then duplicate either of the two lines and select Edit > Transform Horizontal Flip – instant right angles! Now make a duplicate of the right angle you've created, then line up all four line layers so they form a square shape; the house's base area. Then Merge all four line layers together, duplicate again, and move the copy up with the mouse keys to form the flat roof.



4 In a new layer, draw in lines joining the base and roof – hold [Shift] as you draw four straight lines. Again, merge all line layers down to one. Erase any invisible edges with the Eraser set to Block. Finally, fill the surfaces with colour using the Paintbucket set to a Tolerance of 1.

Work with layers for maximum flexibility

We already know how useful layers are, and this is especially true when we're talking about illustration. As you create an artwork you may be regularly (but randomly) adding



Keep each element of your illustration in its own layer, so that everything is editable

new elements; for example, a drawing of a car, with a rectangle slotted in behind it, then some typographical text element and, finally, a block of vibrant colour. Each of the four pieces should appear in its own layer – they can then be hidden, moved, edited and so on independently, without fear of affecting the rest of the image. This also means that you can add layers in between others – most notably adjustment layers. You can place an adjustment layer above a graphic, and make it affect just that layer by linking the two with a Clipping Mask (Layer > Create Clipping Mask).



Find new clip art

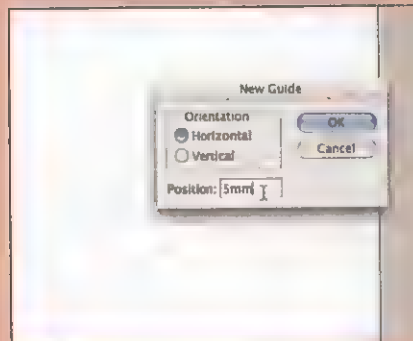
You can find more samples of clip art on the web for incorporating into your illustrations. Do searches for 'clip art', which will unearth sites such as www.clipartconnection.com. However, always check the copyright and sales agreement, making sure to credit any clipart where necessary.

Illustrating for double-page spreads – use guides

You may have been commissioned to illustrate a double-page spread in a magazine – a big job that you'll want to get right. First, establish the printed dimensions of the magazine from the art editor (let's assume it's a double A4 page – 420mm wide by 297mm high). In addition to this, there's a 5mm bleed – a margin by which your illustration can overlap, but which will be trimmed off at the end. So you need to start a 300 pixels/inch file which is actually 430mm by 307mm.

Then add some guides. Do View > New Guide and enter Horizontal 5mm – don't forget to type the mm. Add another Horizontal at 302mm, a Vertical at 5mm and another Vertical

at 425mm. This will enable you to see the boundaries of your working space, and where the illustration will be cropped outside the bleed guides.



Add guides to show your working area, and what will be cropped later



Small blocks of text

Try adding a small block of text to your illustration, to draw focus to that area and suggest a tight compression of information. Even if the size of the text makes it illegible, it may still add something of graphical value to the image, perhaps balancing against larger flat areas or washes of colour.



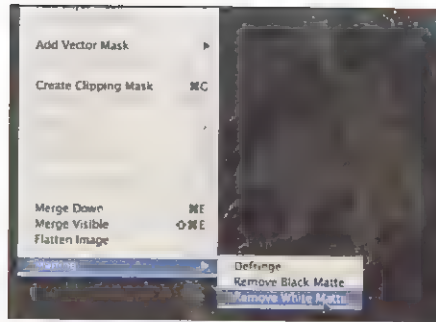
Create drop-shadows

You can use layer styles to add drop-shadows, but here's another way. Duplicate your 'object' layer into another layer, then {Control}-click ({Command}-click on a Mac) the layer thumbnail to select all the content. Select **Edit > Fill > Black**, then **Filter > Blur > Gaussian Blur**. Now shift this layer under your object layer and adjust the position, skew and so on as you wish.



Don't crowd with detail

Depending on the type of illustration you're working on, little areas of detail can help to lead the eye around. However, don't overcrowd the image with minute elements – the viewer won't know where to start, and will find looking at the image hard on the eye. Then again, this might be just the effect you're looking for!

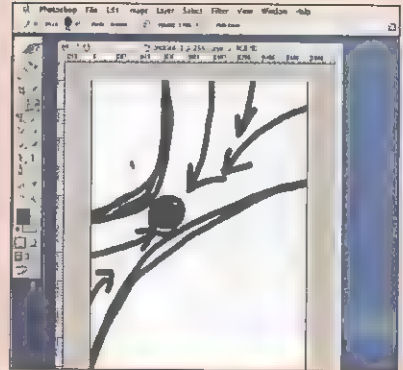


Cleaning up edge pixels from photo selections

Sometimes objects selected from photos and placed in illustrations don't look right because the edge pixels fade to the wrong colour when your illustration's background is white. So try selecting **Layer > Matting**, and then choosing to **Defringe** by an amount, or **remove the White or Black Matte** (edge).

Draw a rough, compositional layer

If you're not sure about the general composition of your illustration, don't go crashing straight in – it will end up looking a mess. Instead, use the **Pencil Tool** in an empty layer to draw a rough outline – then build your illustration up from this.



Use gradients to shade-in objects

In an empty layer, draw an object to which you can add shading, suggesting a 3D quality; something simple, such as a circle, will do fine. Then create an empty layer above this layer and select **Layer > Create Clipping Mask**. Then select the **Gradient Tool**, choose a Gradient shape from the options bar, such as a **Radial Gradient**, and paint into the empty Clipping Mask layer – note how the gradient is only painted inside the shape defined in the layer below. You can add other layers, so that you can blend together several gradients, all masked by the same initial shape. Make sure that you change the **opacity** or **blending mode**, so that they all show through.

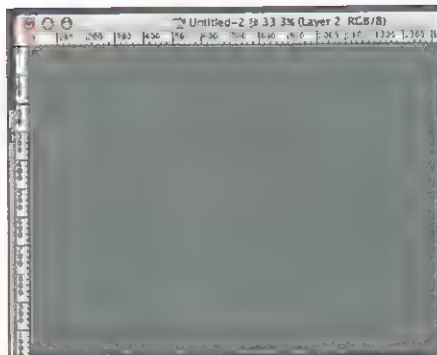
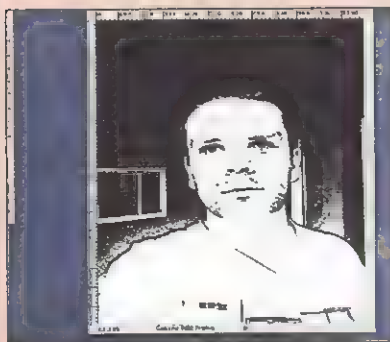


Bear in mind where your work is going

If your illustration is going to be printed, does this mean that folding or binding will be involved in the output process? If this is the case, make sure you don't put important, focal parts of the illustration in areas where they could be obscured or lost in these processes.

Render layers in hard black and white

Set your foreground colour as black and background colour as white. Start with a photographic layer, or pencil sketch, and then do Filter > Sketch > Stamp. First try setting Light/Dark Balance around 25, with Smoothness at 1 for maximum detail – then adjust if necessary.



Subtle colouring for patterns

If you're covering a large area of your illustration with a repeating (often called a 'tiling') pattern, consider the colouring carefully. If the colours are too contrasted, each tiny detail will be asking the eye to focus on it, detracting from the main subject. Use shades that give an overall 'greyer' effect.

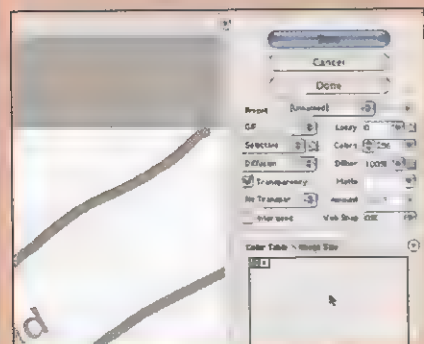


Two ways of using blending modes

The most common way we know is to put blending content in a separate layer, then set the blending mode of that layer – this is useful as it means we can remove, hide or change the layer later. However, if you're very confident – or in a hurry – you can set your Brush to your chosen blending mode and then paint straight into the layer you want to blend.

Quick sketches to share on the web

Illustration isn't always about creating 'bleeding edge' graphics and artworks – sometimes we just need to use Photoshop to illustrate a point. We



Note the number of colours in the Color Table section here – just two!

might produce a sketch consisting of only a few scribbled lines, but they do say that a picture is worth a thousand words! If you're doing this, and planning to share the image on the web, there are ways of keeping the file size down.

First of all, make the image no larger than it needs to be. Then use the Pencil Tool to draw; it only draws 100% aliased lines, so there will be no semi-transparent pixels in the image, just your foreground colour drawn on your Background layer. Then select File > Save for Web and, in the right panel, choose GIF. Note how using the Pencil Tool keeps the file size down, as there are less colours in the image.



Push contrast for maximum impact

When you've finished an illustration, if you feel that it still hasn't got enough 'oomph', try bumping up the contrast. Add a Brightness/Contrast adjustment layer, increasing the contrast a little in the control window. Or flatten the whole image, then duplicate it and set the blending mode of the top copy to Overlay.



Auto Erase with Pencil

When using the Pencil Tool, try ticking the Auto Erase box. Now, if you want to erase a line that you've drawn, you can do so by clicking back on the line and dragging. To draw again, do so on any part of the image that isn't your foreground colour – try it!



Pastiche a famous artwork

Find an image of a famous artwork (try images.google.com), such as Munch's *The Scream*, or Van Gogh's *Sunflowers*. Then alter it to personalise the image as your own – if it's a portrait you could cut someone's face from a photograph and paste it in. Use blending modes to make your alterations more subtle.

Use recognisable symbols to imply meaning

There are millions of symbols floating around our visual culture, and each has its own special meaning. Many of these symbols can even be understood across different languages, such as the @ sign used in email addresses. The illustration shown here uses symbols scanned from washing instructions on clothes.



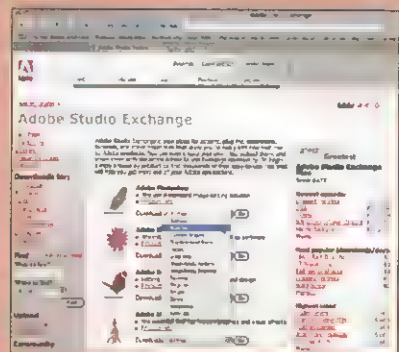
'Paint' a photo into your illustration

Drag and drop a photographic layer into your illustration then, in the Layers palette, click the 'Add a mask' button. Then, making sure that you have the mask thumbnail selected, fill it with Black using the Paintbucket Tool. Now, using the Pencil Tool (for hard edges) or the Brush (for soft edges), 'paint' the photo back in. Using black paints it back in at 100% opacity, but also experiment with grey shades for a more subtle effect. The beauty of this method is that you never destroy the original image – if you don't like what you do, you can just delete the layer mask and start again.

Leaky printer? Turn it into art!

If you've got a particularly messy or leaky printer, use this to your advantage – as soon as the page is printed, smear with a cloth. Alternatively you could slightly moisten the page (after printing), so the ink runs into new shapes and textures, or soak a whole page, then hang it up to run dry.

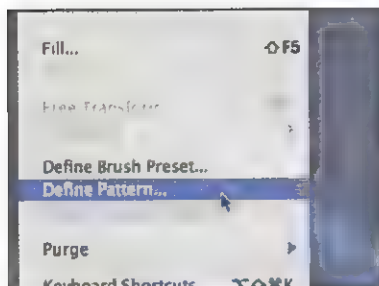
Download creative extras for Photoshop



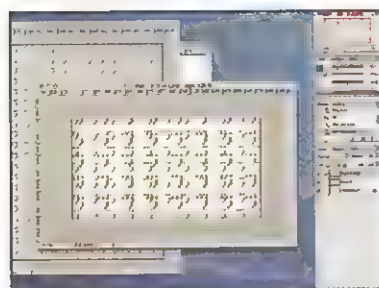
There are plenty of places to download filters, brushes and other extras – start with <http://share.studio.adobe.com>, the Adobe community site for such 'exchanges'. Some are free, others aren't, but keep in mind that nothing in this world is really free – you should at least give a credit, or send an acknowledgment email, to someone if you're using their product without paying. To use a download, first save it on to your desktop and then move it to the relevant folder; typically this will be in the Photoshop > Plugins or Photoshop > Presets folder. Then restart Photoshop and look in the relevant menu, or load your new item into the relevant palette.

Use repeating objects

We can use duplicated objects and patterns to imply distance and space in large illustrations



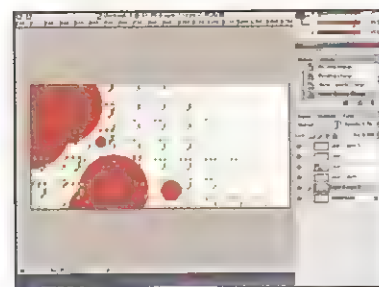
1 Start with a small canvas of just a few pixels, and draw a symbol or random arrangement in a new, empty layer. Then select Image > Size, check Resample Image is ticked, then set Pixel Dimensions to 1,000%; also set to Nearest Neighbor at the Resample Image menu.



2 Create a very large canvas, much larger than the image you need to create, and fill a new layer with your pattern. Then create a third canvas for your illustration, and drag the patterned layer into it. Duplicate the pattern, and scale it down so the new layer still covers the entire canvas, but each symbol is smaller.



3 Repeat, again trying to ensure that the canvas is covered, but with even smaller symbols. It looks a bit of a mess right now, but be patient. Use the Lasso Tool to draw a large, unfeathered, bulbous selection covering the left third of the canvas, then hit Select > Inverse, select the largest symbol layer, and hit delete.



4 Make similar selections (perhaps using selection shapes from drawings or photos) and delete these from the other two layers, allowing the layers to still overlap so they 'fade out' towards the right. Now place other images and layers containing flat colour blocks in the stack, always placing 'big' shapes at the top and smaller ones at the bottom.



Save your Brush settings

It can take a long time to get a Brush's settings just the way you want them, so when you've done so, save them. In the Brushes palette, open the drop-down menu and choose New Brush Preset. Name the preset, and then select Save Brushes from the same menu. When you next go to the Brushes palette you'll see your new preset in the Brush Presets list.



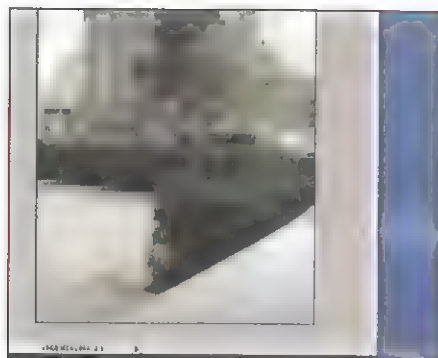
Opacity and Flow

Note the difference between these two Brush options. Flow regulates how much 'paint' comes through in the stroke and can be built-up if the stroke crosses over itself – try it. Opacity reduces the opacity of the paint and, however much your strokes cross, the opacity won't exceed the value you set.



Fill with paint in one click

The Paintbucket Tool is often used to fill a selection, but don't forget that it can also paint without needing this kind of guidance. Using the Tolerance control and tick boxes to set it up, the tool can be used to click inside shapes and fill them with paint.

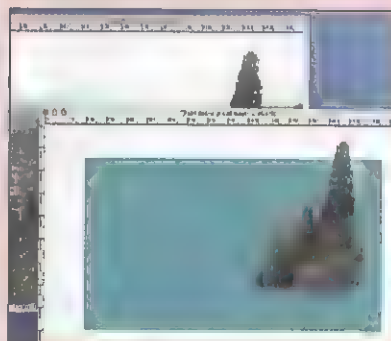


Gradually 'digitise' an image

Start with a layer containing a photo, then duplicate it. Select the duplicate and select Filter > Pixelate > Mosaic and set the Cell Size quite high. Then add a layer mask to this duplicate and, using black and white, draw a gradient in the mask, so that the overall effect shows the 'digitisation' fading with the gradient.

Clone Stamp from one image into another

You might not have realised it, but you can Clone Stamp content from one image into another – this is a quick and easy way of adding to an illustration from another source image. Simply [Alt]-click on the source image, then go to your target image and paint!

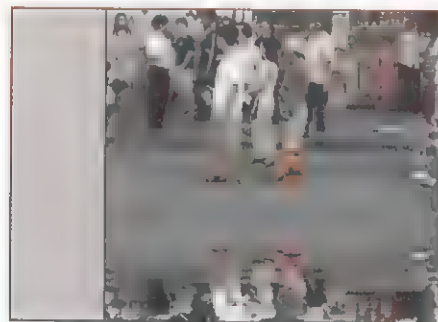


Why do we frame?

Consider the value of adding a 'fake' Photoshop frame around an image – what does this add to the image? If it's just to 'make an illustration more interesting' then maybe it's the image that needs work, not the way you're presenting it! In some cases though, a simple frame can help to pull the image forwards.

Create a random pattern using overlays

Start a file with a very large canvas, draw a simple shape (perhaps a filled polygon) and use this to create your own pattern (draw a rectangular marquee around the shape, then select File > Define Pattern). Fill a fresh layer with the pattern and, if it isn't already a black-on-white pattern, alter it so that it is. Paste this layer into a much smaller canvas. Then duplicate the layer and select [Control]+[T] ([Command]+[T] on a Mac) so that you can scale the layer down by a random amount (don't make it a neat amount, such as a half, or a third). Finally, change the duplicate's blending mode to Screen and you'll have a new random 'texture'.

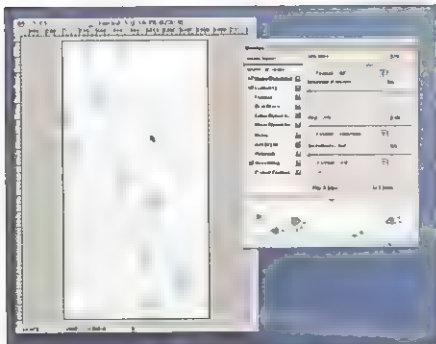


Use Distort filters to create water effects

There are various filters in the Filter > Distort set which will prove useful for creating rippling water effects – Ocean Ripple and Ripple are good examples. To create the impression of an object reflected in a lake, duplicate the object's layer, select Edit > Transform > Flip Vertical, then apply the Ripple filter.

Create a Brush which randomly splatters images

Start with a new image and a white background. In a new layer, draw a Brush tip design as you would like to see it in its largest form (we can vary the Brush size when we use it).



What beast was here? You can have a lot of fun with brushes when you explore the controls

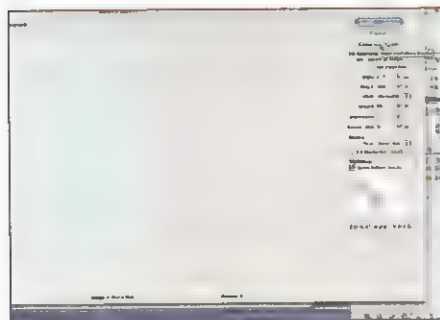
Then use the Rectangular Marquee Tool to select your design, and choose Edit > Define Brush Preset.

Now open the Brushes palette, select Brush Tip Shape, and select your new tip shape from the previews displayed in the table. Tick the Spacing, and push the slider up to a high value. Now activate Shape Dynamics, set the Angle Jitter to around 20% and its Control option to Direction. Then activate Scattering, and push the Scatter slider up. You'll soon get the idea of how these controls work, allowing for some effective 'random' splattering brushes.



Paint using All Layers

When using the Paint Bucket Tool tick All Layers in the options bar. The tool then makes a decision about where to paint by looking at all the layers in a file, but only paints into the layer you're currently in. This is useful if you're unsure as to whether this painting is a good idea – the layer can always be deleted later.



The Pattern Maker filter doesn't create tiled patterns!

This is an odd one – you would expect Pattern Maker to create nice neat patterns from selections, but it doesn't. What it does do is create random patterns based on chopping up and rearranging your selection. All you have to do is hit the Generate button repeatedly until you see something you like!

Build up your painting like a 'real' painter

If you're 'painting' an image from scratch, using one of the Brush tools, approach the process in the same way as a real painter would when working from a photograph or an actual scene.

Start with a layer above a white background layer and, in this layer, underpaint the basic, rough shapes of your image using a very wide, soft brush – you're basically painting what you would see if you squint at a photograph so that only vague coloured splodges show through. Then, in the next layer up, add more detail, using a smaller, harder brush shape. Continue building up layers in this way, so that only very fine details appear in the top layer.



What's in a name?

Just because a filter is called Paint Daubs or Photocopy, this doesn't mean the results will always reflect the title – in some cases they won't even come close! By all means use those filters, but use the names as a reminder of what they do, not an accurate description.



Quick CMYK preview

You'll usually be working on your images in RGB mode, but, if you want to see what they'll look like when exported as CMYK files, there's an even quicker way than the usual View > Proof Colors. Use the keyboard shortcut [Control]+[Y] ([Command]+[Y] on a Mac).

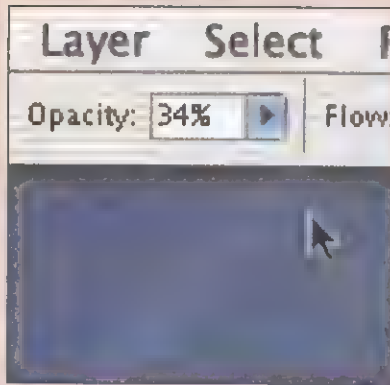


Delete last Lasso point

When making a Polygonal Lasso selection, if you're unhappy with the shape you're drawing you can delete the last point by simply hitting [Backspace]. To delete a whole load of points, hold the key down, but watch out – it races through them pretty quickly!

Quickly change the opacity of the Brush Tool

With the Brush Tool selected type numbers 1–10 to set the opacity in increments of 10. To set a specific value, type two numbers; for example hit 2 to set 20% opacity; type 2 + 3 to set to 23%. You can set the flow by holding down [Shift] and typing the required numbers.



Use a Dual Brush to create interesting brush edges

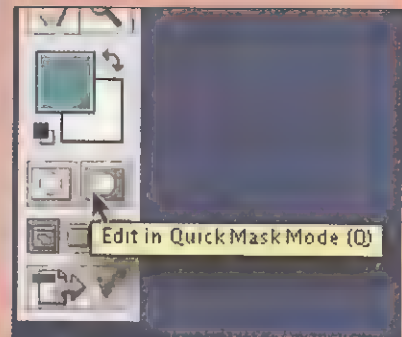
First select the Brush Tool, then, in the options bar, hit the Toggle Brushes Palette button so the palette opens. Start by selecting a Brush Tip Shape and setting up your main brush – Spacing, Brush Tip, Size, Hardness and so on.

Now select Dual Brush, and you can set up another brush that runs along the same path as the original one, but blended with it – see the Mode setting used to do just that? So it stands to reason that you should set this second brush up with a different, perhaps more textured, head type and settings. Try making your own Brush tips (Edit > Define Brush Preset) and combining them.

Lock the position of a layer mask

If you've applied a layer mask to a layer and want to make sure that it stays in position, select the layer mask's thumbnail first, then hit /. This locks the position of the layer mask; it can be unlocked by hitting / again, or by clicking the buttons at the top of the layer.

Use Quick Mask Mode for... quick masks!

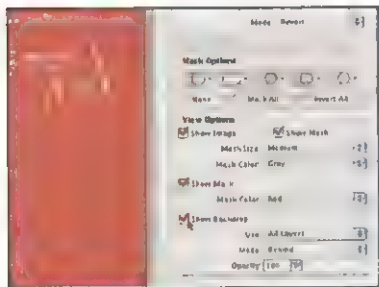


Quick Mask Mode enables us to paint masks that can then be turned into selections in Standard Mode. Start with an image to mask. Then, in the Toolbar, click the Quick Mask Mode button, the right-hand button just below the colour buttons.

Now paint on to the canvas, using the Brush or Pencil tools, and note how the canvas is marked with red to show what is being masked. The Opacity and Color controls for the Brush are irrelevant, because the tool is just being used to create the mask. Once you've finished painting the mask, click the Standard Mode button (next to the Quick Mask Mode button) and you'll see how the mask has been made into a selection.

Make your layer 'liquid'

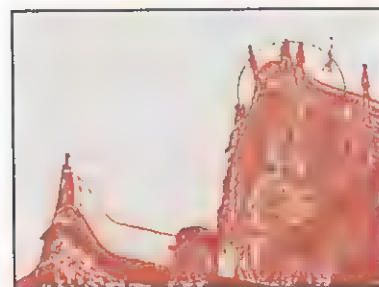
The Liquify filter enables you to get down to some seriously weird pixel pushing



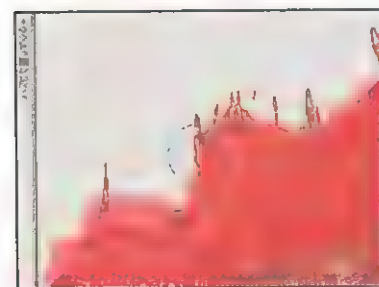
1 Select a layer you want to work with, preferably one with transparent pixels around the edge and a subject in the middle. Then select Filter > Liquify. The Liquify window opens; in View Options tick Show Mesh to help you see what's happening. Untick Show Backdrop to hide the other layers, including the original version of the one you're working on.



2 The Tool Options enable you to set the size and power of the Liquify brush, and these will be easier to set once you get started and see how the tool works. In the column of buttons on the left click on the top button – the Forward Warp Tool. Drag it around the image and notice how this works – you can stretch out or push in the image.



3 The next button down, the Reconstruct Tool, enables you to reconstruct the image by means of painting on the altered areas – try it. Twirl, Pucker and Bloat are all pretty self-descriptive effects – holding [Alt] while using them changes the twirling direction, bloats and puckers respectively. Push Left and Mirror are less easy to control, but Turbulence is great for random warping.



4 If you absolutely hate what you've done, just click Restore All in the Reconstruct options. Or, if there are parts of the layer that you don't want the tools to affect, use the Freeze and Thaw Mask Tools to lock and unlock pixels. Finally, click OK, and the layer will be thus rendered.



Quickly fit an image on screen
To quickly resize the image window so that it makes the maximum use of your screen, simply double-click the Hand Tool icon on the toolbar. The image is displayed in full, without any scrollbars.



Always show layer bounding boxes
Select the Move Tool and, in the options bar, tick Show Bounding Box. Now, every time you use the Move Tool, the current layer's bounding box will show, allowing for swift Transform alterations. This can also help to reveal rogue layers that are lost in your layer stack.

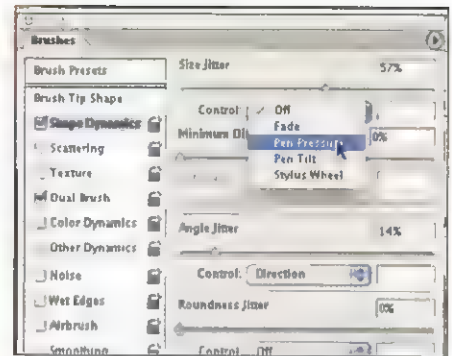
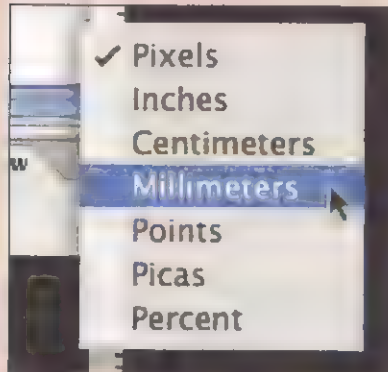
Change the ruler measurement type

If you're using the canvas ruler (View > Rulers), you can change the measurement value displayed by right-clicking ([Control]-clicking on a Mac) on the ruler and then choosing from the list – for example Millimetres or Centimetres.



Make masks from text

Masks can easily be created from text using the Type Mask tools. These work in exactly the same way as the Type Tool, but create a selection, rather than filled pixels. To move the mask once you've typed it, use the Rectangular Marquee Tool with the New Selection button activated, and drag it around.



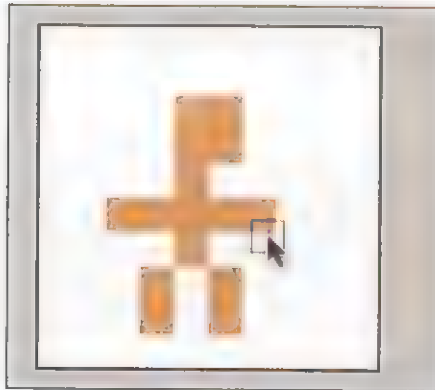
Use pen pressure to control your brush

If you're using a pen and tablet for drawing you can make certain brush parameters pressure-sensitive. Open the Brushes palette and tick the Shape Dynamics option, for example. At the top is Size Jitter; set this to 50% and Control to Pen Pressure, then try your pen again.



Recreate the masters

Take a look at different styles of art and identify some that you can emulate in Photoshop. Perhaps you can use the Brush tools to create impressionist oil paintings – try loading Wet Media Brushes in the Brushes palette – or create modernist compositions by filling Rectangular Marquee Tool selections.



Test your powers of communication

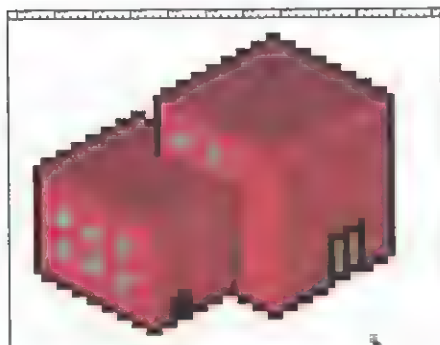
Here's a test. See how small you can get an image, icon or drawing while still communicating the message accurately. And I mean really small; just a few pixels in height and width. Use the Pencil Tool set to 1 pixel, and zoom in as close as you can.

Create a quick 'posterised' image from a photograph

Open your photo and increase the contrast; if you use an adjustment layer to do this, flatten back to one layer again before continuing. Then decide on three colours – one for your 'black', one for 'white' and one for the 'greys'. You could perhaps use three colours with the same Hue and Saturation values, but varying Brightness. Go to Select > Color Range and, from Select, pick Shadows. In a new empty layer, do Edit > Fill and fill with your 'black' colour. Then hide this layer, select Color Range again, choose Midtones, and fill this selection with your grey in a new layer. Hide both new layers and repeat to create a Highlights layer. Finally, add a white background layer beneath all the others.

Ensure consistent lighting in your 3D pixel art

First of all, shading should reflect the light source, so be consistent across every object in your illustration – houses, cars, people and so on. Use a colour with 50%



Take care when individually lighting and shading sides, edges and outlines

Brightness for the top flat 'side', 60% for left sides and 70% for right sides – obviously each object's colour doesn't need to be the same, but make sure you use these 10% increments for each side. Also look out for shadows of objects cast on the ground, or on other objects.

'Mountain' edges that jut out towards you should be lighter than the outline and shading colours, and 'valley' edges, folding in, should be darker than everything else. This makes the image easier to read, stressing the black outline while also telling us where and how the edges occur.



Re-colour images using a 'photo palette'

Once your image is finished and flattened, here's something to try. Use the feature usually set aside for photography, Match Color (Image > Adjustments > Match Color), to try out a different colouring/lighting palette from any other open image. It might just be the tweak of realism your image needs if the colours look too neon and artificial.

Nesting layer sets – be organised

One complaint with older versions of Photoshop was that you couldn't place one layer set within another, but in the new CS version you can do exactly that. This is especially useful if you're drawing a large structure made up of many different elements. For example, you might have a House layer set containing layers of lines, shading and lighting for just one house; this set could in turn be placed within a Village layer set, full of other houses and structures, each in their own sets. So, when you've finished drawing buildings, and have perhaps moved on to drawing countryside, you could close the whole Village set to tidy up the Layers palette.



Perspective-transform a flat object to create distance

Start with a flat object, such as a large word. Then select Edit > Transform > Perspective and pull the corners and edge handles around so that the object appears to recede into the distance. Do the same with other 'flat' layers, so they all point towards the same 'vanishing point'.



Use the Grid

If you're getting lost in the vastness of your page, try turning on the Grid (View > Show > Grid). This might help you think of the illustration in terms of 'blocks' or divisions that need to balance each other out; for example, never place a horizon across the middle of an image – try splitting it into thirds instead.

ARTWORK AND DESIGN – THE BIGGER PICTURE

There's a lot going on in the creative world outside Photoshop. In this chapter we'll look at ways of using the software with other graphics applications, and more 'hands-on' art media

There is life outside Photoshop. It may not seem the case when we've spent so long looking at all of the software's intricacies and features, but it's often just one small part of the broader art and design process. Using Photoshop all the time, for every job, is like living in one town your whole life and never setting foot outside of it for fear of getting lost. Once you look at the bigger picture, and get to grips with all that the art and design worlds have to offer, you'll be glad you did.

Zoom out, one step

Yes, Photoshop is great. We use it all the time, for all kinds of jobs,

but most notably it's the industry leader in bitmap imagery – that is, images made up of pixels, rather than vectors. And that is the crux of the issue: while Photoshop is the undisputed champ in its particular field, other applications rule the roost in vector art (Adobe Illustrator and FreeHand) desktop publishing (Adobe InDesign and QuarkXPress) and web design (Dreamweaver). We're not suggesting that you should learn to use every other design application in existence (although you may already be using some of them anyway), but it does help to understand how Photoshop can be used within the wider spectrum.



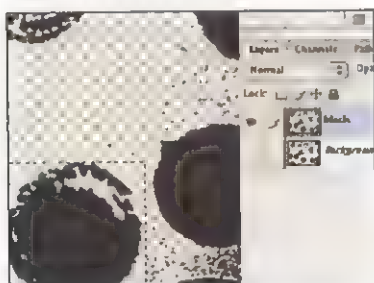
Page 84 Create backgrounds for PDF files opened in Photoshop



Page 88 Create GIF animations using Photoshop's sister product, ImageReady



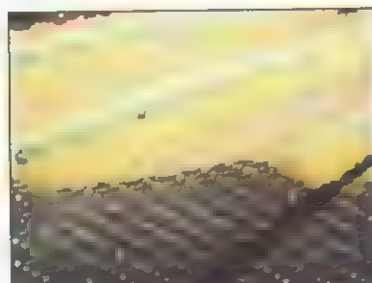
Page 92 Work with unusual photo formats using Lomography cameras



Page 93 Use sampled pen marks to create realistic brush tips for drawing



Page 97 Create snapshots from fractured 3D models for use in Photoshop



Page 102 Use textures from scans or photographs to add a new dimension

Adobe appreciates this too, so it has made it easy for us to jump from one software package to another, or to save files in a way that allows us to open them universally. In this chapter we'll take a look at how Photoshop works alongside other graphic design packages, and highlight the tips and tricks that make interaction easy.

Take a look around...

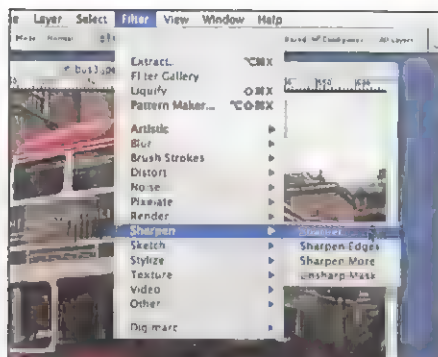
Now, if we take another few steps back from the computer what do we see? There on your desk – yes, it's a pen and paper! Some inks too, and that coloured crepe paper you never got round to using. Then there's your

scanner, of course, and perhaps you have a photocopier. Take a trip down to the kitchen and there are more printing materials – or potatoes at least – and teabags which could be used to stain paper, before or after you print a design on to it. In short, there's a whole world of objects, materials and surfaces waiting to be explored outside Photoshop and your computer. Your scanner or digital camera becomes your gateway between different styles of designing – but styles which can also be combined to impressive effect. And what do you know – Photoshop is the perfect meeting place for all these disparate methods.



The bitmap king

If you need a particular graphic for use in another design application, remember what Photoshop excels at – painting. As a bitmap editing application, it's great for creating soft-edged, natural-feeling artwork and photo-edits that you couldn't manage in illustration packages such as Illustrator or FreeHand.

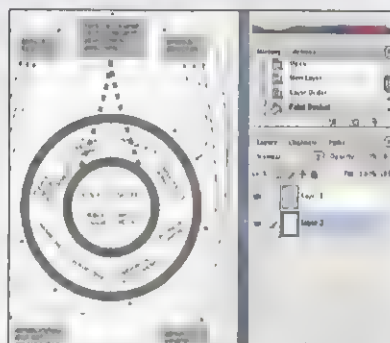


Sharpening blurred video stills

Video stills can be opened just like any other image file, but they may be a little blurred in places. To sharpen the whole image, select Filter > Sharpen > Sharpen or Sharpen Edges. To draw attention to a subject in the image use the Sharpen Tool, set to medium strength and with a soft-edged brush shape.

Create backgrounds for PDF files opened in Photoshop

If you open a PDF file in Photoshop, you may find that the content appears over a transparent background. This might make the text hard to see, so create a new layer below and fill it with white to produce a better background.

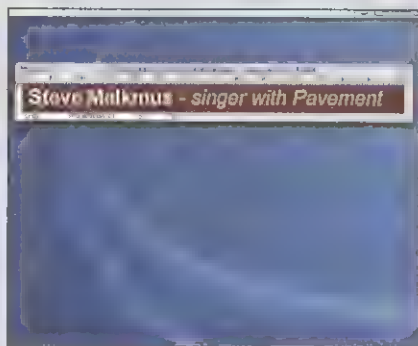


Copy Merged

You can quickly place Photoshop images in Microsoft Word files – and you don't even need to flatten all the layers first. First do Select > All and then Edit > Copy Merged. This copies the whole project as if it was merged into one layer, but doesn't actually affect your original PSD file. Then, in Word, place the cursor in the correct place, and do Edit > Paste.

Creating graphics for video captions

If you're editing video, you may need a static graphic such as a caption for a 'headshot'. What you do with that graphic once it's in your video editing



Make your captions clear and concise so that they can be easily read

software (such as Final Cut Pro) is up to you – you could fade it in, fade it out, move it around the screen and so on – but you will need the graphic to start with.

First check that the colours you're using are clear (black text on a white background for example) and that the typeface style and size make the text easily readable – remember that the viewer might not be 20 inches from a computer screen, but several feet from a TV screen. If the final video is being exported to a smaller online or CD-ROM format, such as QuickTime, there may be some blurring and quality loss as the image is shrunk, so take this into account as well.

Cleaning digital grain and 'squares'

Images taken from sources such as video will often contain ugly grain, or colours shown in blocks. Use the Blur Tool to soften this where necessary, as it might not appear everywhere in the image. You'll most likely find it around edges, and areas of high contrast.



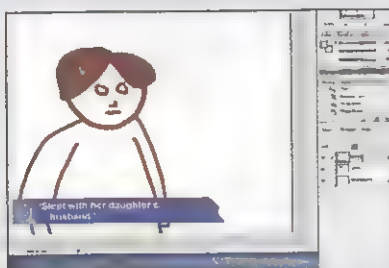
Error: Clipboard too large to export

If you're working between Photoshop and another application, you may sometimes see the above error, or something similar. This is because imagery that has been placed in Photoshop's Clipboard memory after you perform a copy or cut is too large, and is causing problems for Photoshop when you try to place it somewhere else. To fix this, first check whether the content that you're pasting needs to be so large – can you temporarily change the size (Image > Image Size) of your image and then try copying to the Clipboard again? Or, under Preferences > Memory and Image Cache, increase the Memory Usage, restart Photoshop and try again.

Back to school with teabag art!

This is something that you may remember from school, but it's still a great effect! Use wet teabags to stain paper, then scan the paper and use the texture, colour and so on in your images. You could use this effect to create a pirate treasure map for a children's birthday party.

Creating video stills – check your dimensions



First, check the dimensions of the full video screen. Cameras, and the hardware that your video editing software outputs to for saving to digital video tape, work differently depending on the country in which the hardware was built and primarily designed for use. Typically, the European PAL system saves video which is 720 pixels by 576, and the US NTSC standard is 720 by 540, but double-check this, as technologies are constantly developing. In Photoshop, start a file with these same dimensions, creating a 'dummy image' which will simulate the video content. Then design your graphic still in higher layers. Once you've finished, merge all these graphic layers together, delete the dummy layer, crop the whole image around your graphic and save.



Freeing-up memory

If you're having problems with the current Clipboard information being too large to export, select Edit > Purge > All. This clears all the History and Undo States (so make sure you're happy to do this first), and also the Clipboard information – so you'll need to try copying to the Clipboard again.



Use stock imagery

There are plenty of websites and services that offer the use of stock imagery, such as photography. The leader in the field is corbis.com, but also try www.sxc.hu and www.indexstock.com. These sites can be very useful for tracking down images you couldn't capture yourself – such as exotic locations or animals.

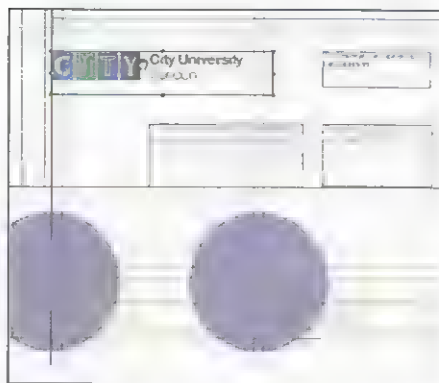
Creating image sizes for desktop publishing projects



TIFFs for DTP

As desktop publishing projects are usually destined to be printed, images created for DTP should be saved as TIFFs. Also check that they've been proofed (View > Proof Colors) and saved as CMYK files. To be 100% thorough, also check that the Color Profile is suitable (Image > Mode > Convert to Profile).

You may sometimes need to create images for desktop publishing projects. These projects will usually be undertaken using dedicated DTP



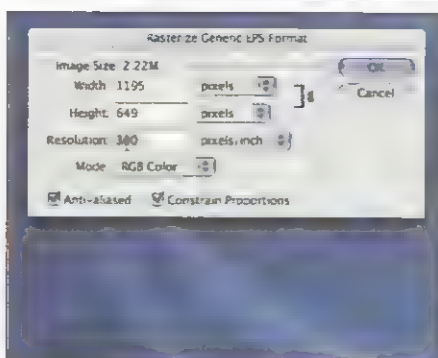
Establish the size of the images you'll be using, then create them in Photoshop

software, such as the old industry standard QuarkXpress, or relative newcomers such as Adobe's InDesign. If it's a large DTP project with just a few images, lay out the whole design in the DTP application first, placing dummy boxes to indicate where the images will go. Then note the dimensions of these boxes and, in Photoshop, start a new file based on these dimensions. This ensures that you don't end up scaling the images up or down in the DTP software, which may result in quality loss; remember, these applications aren't image-editing specialist like Photoshop.



Wrap a flat image

Yes, flat images now come in 3D! Many 3D editing packages allow users to 'wrap' a flat image over a surface and, naturally, the best tool for creating said images is Photoshop. Consider how the image will bend, warp and become textured in the wrap, and design it accordingly.



Why use EPS file format?

The EPS file format (Encapsulated PostScript) is useful, as it enables you to include vector and bitmap images in one file. So, if you save a file as an EPS from Illustrator, on opening it in Photoshop you can set the dimensions and resolution, because the vector artwork is scaleable without quality loss.

Flatbed scan with the lid up for extra depth

Many flatbed scanners use a lid to push the paper against the glass and block out external light sources – but consider the effect of keeping the lid up while you're scanning. If the material that's being scanned contains some kind of depth or texture, for example crumpled paper or corrugated card, letting some light in might help to enhance this in the scan.

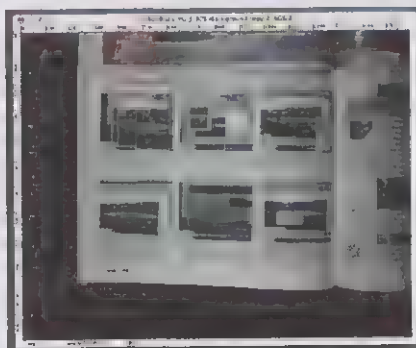
If the material being scanned is semi-transparent, and you don't want too much external light interfering, you could lay a sheet of light, white paper on top, rather than putting the whole weight of the lid down. Also, turn off other light sources in the room, such as lamps, and draw the curtains.

Scan or snap? It's a question of time, and quality

We all know that the best way to transfer an image on paper into Photoshop is by scanning. This will always ensure the highest-quality image and colour. However, if you're pushed for time, and are just looking to transfer a doodle or a magazine article for reference, why not take a photograph of it with your digital camera and then import this – you may find this is a quicker option.

A few pointers though. Try to get 'on top' of the image, so that it's directly facing the camera lens. This may cast shadows, so use a directional lamp (a desk lamp will do) or a curtain to combat the problem. And don't rely on this technique for scanning

high-quality images; the colours and lighting will be shot, and you'll end up having to do a lot of Photoshop tweaking afterwards.



If you're just scanning for a quick reference, taking a digital photograph might be quicker



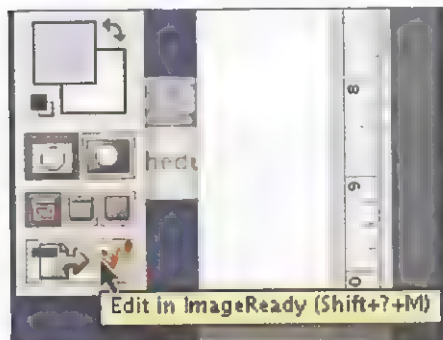
Print with anything

If you're creating prints to scan for later use in Photoshop, think creatively. Remember what you used to print or paint with back in school – potatoes, hands, fingers and so on. Go wild, make a bit of a mess – just make sure that it's all dry before scanning and, if the paper gets 'buckled' by drying paint, use the scanner lid to press it down.

Use Adobe products together for guaranteed compatibility

Software packages generally work better with other applications from the same stable than they do with software from other manufacturers. So, to increase your chances of files

being recognised across multiple programs, and to make navigation from one to the other that bit more comfortable, use other Adobe products – InDesign, Illustrator, ImageReady and GoLive – with Photoshop. Keep in mind, though, that Macromedia software (the main competition) may be better for some jobs, and will often be just as compatible with Photoshop. It would be stupid of manufacturers to ignore the fact that designers use a wide variety of packages, often in quite unexpected ways, so each new version of these design tools is developed to take this into account.



Photoshop allows us to jump to ImageReady, Adobe's specialist web image-editing package



Mark making

When making 'hand-made' graphics on paper (for scanning), don't try and create a final piece there and then. Treat the first stages as 'mark making' so that you cover a page with different kinds of prints and marks, each with white space around them. Then, once scanned, you can select and exclude each of these objects, and composite accordingly.

Create an animated GIF banner

Produce simple animated images for the web by combining Photoshop and ImageReady



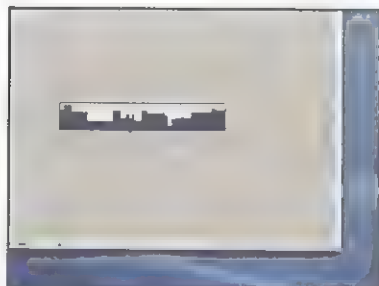
Slow down animated GIFs

When creating your animated GIFs in ImageReady, look in the Animation palette, at the value in seconds beneath each frame. This is actually a menu, which can be opened to set the pause between one frame and the next. If you're about to tween two frames, set this timing first so that it's inherited by each frame in the tween.

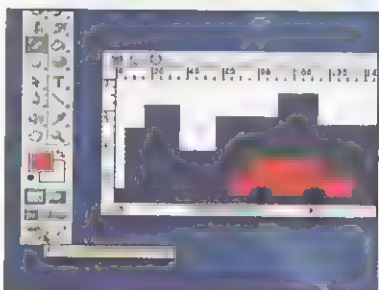


Keep it simple

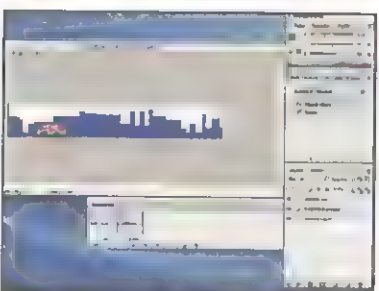
If you're creating an animated GIF sequence, keep the content nice and simple. Photo imagery with thousands of colours will take ages to load, and won't really stand out on a web page featuring lots of other distracting information, such as the site's content and other banners.



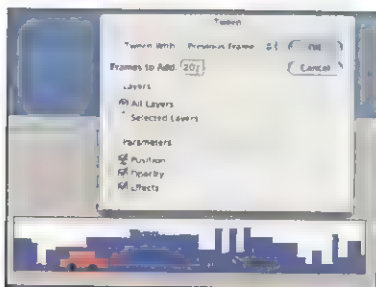
Start a new Photoshop project with a white background, 72 pixels/inch resolution and 500 pixels wide by 80 pixels deep. Create a new layer and make lots of Rectangular Marquee selections, then fill these with paint to create a simple cityscape of overly-tall, narrow buildings. Using the Transform Tool, stretch the image horizontally so that it's much wider than the canvas.



Position the cityscape so that it touches the bottom edge of the canvas, with the left edge touching the left edge of the canvas. In a new layer, draw a car, again using the Rectangular Marquee Tool. Then, in the bottom of the toolbar, click the Edit in ImageReady button to make the switch.



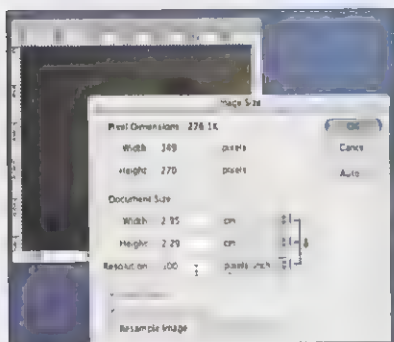
In ImageReady select Window > Animation to open the Animation palette. At the bottom of the palette click Duplicate Current Frame, and you'll see a second frame created. This is the end point of the animation, so, in Photoshop's Layers palette, select the cityscape Layer and move it left using the arrow key. The right edge should now be aligned with the canvas edge.



Back in the Animation palette, click the Tween button, which will add incremental parts of the animation. In the pop-up, enter 20 frames to make it nice and smooth. Use the Animation palette buttons to view it now. Finally select File > Save Optimized As... and then try out the animated GIF in your browser.

Preparing video stills for print

First, select **Image > Mode > CMYK** to set the colours for printing. If sharp print quality isn't an issue, print now. Otherwise select **Image > Image Size**, untick **Resample Image**, change **Resolution** to 300 pixels/inch and hit **OK**. The print will be smaller, but better quality.



Think outside the box

Yes, it's a horrible, over-used phrase but it really does help to look away from your computer from time to time. Use other materials to create images, then work with these in Photoshop. Go outside your studio, office or bedroom and take a look around; let everyday scenes, objects and images inspire your work.



Tooltip letters

When you hover the mouse over a tool in the Toolbar, you'll see the tooltip appear, telling you the name of that tool. But you may also notice a letter in brackets. This is the keyboard shortcut that can be used as an alternative to select that tool. For example, to select the Brush Tool, hit [B].

Flatbed scanner or printer/scanner?

In the old days of image editing, if you wanted to get a printed image into your computer you had to use a flatbed scanner – no choice, no argument. However, many printers



Transparent backgrounds

If you've created an image with a transparent background, you may find that when you open it in another application it's set on a white rectangle. To stop this happening, first make sure that all background layers are invisible, so the image appears to be 'floating'; and merge all visible layers. Then select **File > Save**, and choose **PNG** as the file format.

HP OfficeJet PSC 1205 All In One Printer

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Technical Data

Model Number: Q1665A

Two for the price of one – you can scan and print with the same hardware

work by dragging paper through a wheel like a mangle, so it made sense when manufacturers like Hewlett Packard came up with the idea of using a scanning cartridge in a printer to read an image in this way, combining the two functions in one machine. Buying a printer/scanner is cheaper than forking out for a new scanner, and it also saves desk space. However, the design means they're only suitable for scanning paper, or at the most, thick card, so they're not suitable for scanning objects. Another drawback is that the paper can generally be no wider than the A4 tray width – it can't hang over the edges, as on a flatbed scanner.



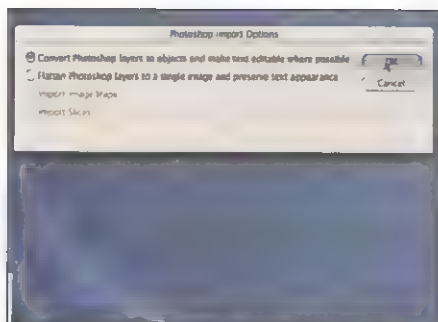
Creative damage

Create a simple artwork in Photoshop, print it off, then think of a way of damaging or affecting the paper. Wet it, steam it over a kettle, rub in dirt or food, or cut it up and put it back together in a different way. Then scan or photograph the results, depending on the state the image is in, and carry on working on it in Photoshop.



iMovie stills in Photoshop

If you use Apple's simple video-editing application, iMovie, you'll be interested to hear that saving video stills is very easy. Drag the playhead through a clip until you see a relatively unblurred image in the large preview window, then select **File > Save Frame As**. Then open the still in Photoshop to tweak it.



Opening Illustrator files in Photoshop, and vice-versa

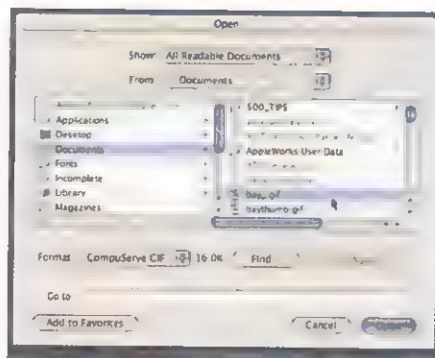
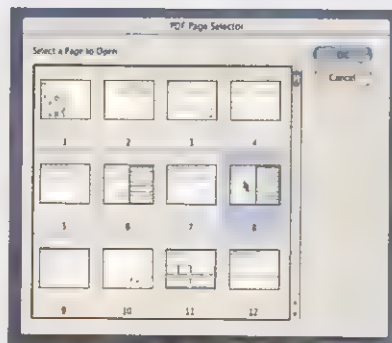
As both Illustrator and Photoshop are Adobe products, it's relatively painless to open a Photoshop PSD file in Illustrator, or an Illustrator AI file in Photoshop. In Illustrator you're even given the option of opening a flattened image, or converting layers into editable objects, as shown here.

'Interfere' with scanning for unusual results

Rather than just scanning your images as usual, why not try and make more interesting use of the technology, and interfere with the process in some way? Most flatbed scanners literally scan a light across the paper, and moving your paper during the process isn't usually advised. But think about what kinds of effects you could create if you did move the paper – try it. You'll probably have plenty of time to experiment, as scanning can take a while. Try dragging the paper to follow the scan movement, or away from it, or wiggling it around. If you're using a printer/scanner, try dragging the paper through, or using paper that's too small to feed properly.

Edit a single PDF page in Photoshop

PDF files are often made up of several pages, and they're read like a book using Acrobat Reader. But if you want to edit just one page, you can. In Photoshop, select **File > Open**, and choose the PDF. Then, in the pop-up, select the page that you want to edit.

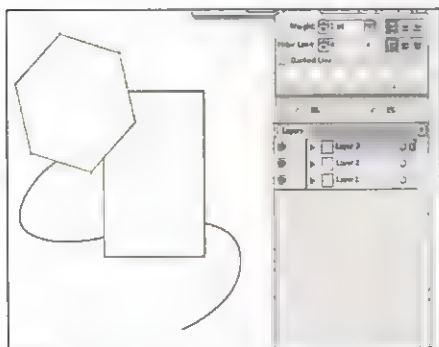


Opening unusual image formats

Photoshop does a pretty good job of opening any image format, even if it was created in a vector or 3D application. If you're not sure whether Photoshop will cope with an image select **File > Open** and browse to the image. If it isn't greyed-out, you can open it.

Work with layers in Illustrator too

Illustrator images are made up of paths and vectors which can each be selected and edited independently. As a result, you can make up an image with several such elements



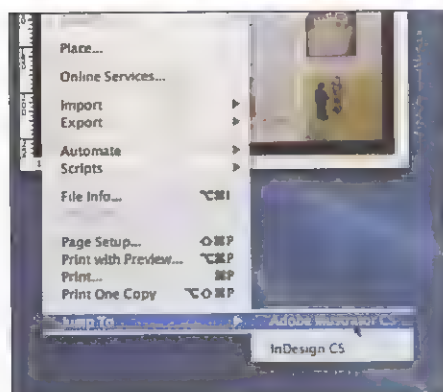
Work with Illustrator layers for maximum Photoshop compatibility

residing in one layer, but with each one still being editable, unlike elements in Photoshop layers. However, it's still a better idea to use layers to build up your images, just as you would in Photoshop. Not only will this encourage you to work using one, uniform system for all your art and design projects, but it's also easier to find elements and re-stack the image when you work in this way. Perhaps most importantly though, it also allows us to save Illustrator projects as Photoshop PSDs, which can then be opened in Photoshop, with everything present in editable layers.



Scan through materials

Before placing your object/paper/card/ on the scanner, lay a semi-transparent material on the glass; something like Clingfilm or opaque paper, or material such as thin muslin, netting or chicken wire. Use anything which will affect the scan but still let the image show through.



Jump from Photoshop to Illustrator in one click

Adobe knows that lots of people use Photoshop and Illustrator together, so it has built in the File > Jump To > Illustrator feature. Select this and the Photoshop file that you've been working on will reopen in Illustrator, layers and all.

Creating PSDs from PDF files

You can convert a multi-page PDF file (the kind that you normally open using Acrobat Reader) into a folder full of Photoshop PSDs, each one showing a page or spread. Select File > Automate > Multipage PDF to PSD, then enter the source, and the folder you want to save to. To then edit a page, simply open it in Photoshop as usual.

If you need to make some kind of uniform change to the PDF pages, such as adding a colour tint to every page, you might find it easier to create an Action which does this, then use the Automate > Batch function. Of course, if you have the Acrobat Studio software, which creates PDFs in the first place, it might be easier to use this.



Realistic graffiti effect – part 2

While you can use the Brush Tool to simulate the look and behaviour of a spray can, nothing beats the real thing. Spray-paint on to white card or some other surface that won't buckle and can be scanned or photographed. It's less editable than an effect created in Photoshop but, then again, it looks better to start with.

Something completely different: Lomography photos in Photoshop



Video stills to film strip

In a video-editing application, save a number of consecutive frames as stills. Then open the stills in Photoshop, composite them in another canvas so they appear in a row, then merge all the stills down to one layer. Draw a long black rectangle behind that layer to frame the whole lot – an instant 'filmstrip graphic'.



Lomo action shots become single-frame action shots in Photoshop

images. Check out <http://shop.lomography.com> to see some of these cameras, made and feverishly promoted on the web by the people at Lomo. So how does this relate to Photoshop work? Well, for example, the Actionsampler camera takes four pictures in quick succession, splitting the frame into 2 by 2 smaller images. You could cut and paste these so that they overlap in a new Photoshop file, and then blend them using Soft Light mode so they combine into one image. If there's a lot of action going on, the final image should convey this – try this method with pictures taken at a sporting event.



Copying vectors from Illustrator

You can copy an object from an Illustrator file and then paste it into Photoshop so that it's still editable as a vector. Select the object in Illustrator and do Edit > Copy as usual – then go to Photoshop and do Edit > Paste. Choose Shape Layer, then use the Pen Tool and the two Selection Tools to edit points, curves, location and so on in the shape.

Mixing the rough with the smooth

If you think of imagery created on your computer as 'high-tech' and anything created outside it, on paper for example, as 'low-tech', then what happens when we mix the two in one image? Photoshop can, of course, be used to produce some nice and mucky, grungy effects without any low-tech assistance, but it's a method used by many illustrators. Start with an ink or paint-splattered page and scan it. Then, in Photoshop, create a piece of sharp, neat line art to lay on top of it, or maybe add some Type Tool text. Try drawing with Anti-aliased unticked where possible, so that the edges stay sharp and contrast with the texture and quality of the scanned

imagery. This approach won't always work, but it can produce some very engaging results.



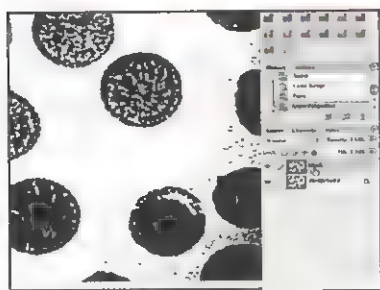
See Toby Leigh's work – hand-made art mixed with digital – at www.folioart.co.uk

Brush tips from pen marks

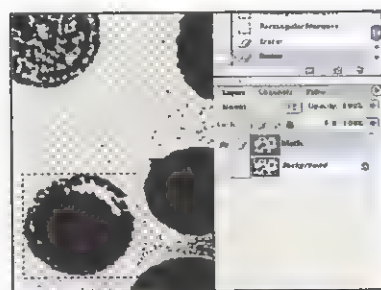
Combine hand-made scribbles with the Brush Tool to create a realistic drawing effect



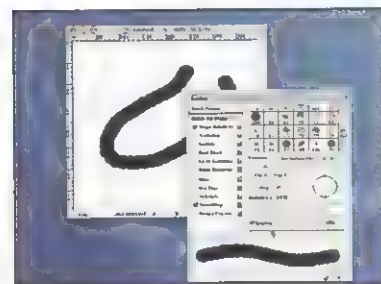
To Start by drawing marks on a piece of white paper. Use a pen or, even better, a marker – these marks were made using a bingo 'dabber' pen. Then scan or photograph the marks, and open the file in Photoshop. Now, depending on the image you created, it may need beefing up a little.



To Duplicate the Background layer and change the duplicate's blending mode to Overlay to heighten the Contrast. Merge the layers into one and apply the Stamp filter, so that the image is rendered in just two shades, black and white. Then go to Select > Color Range, select all the black Shadows, and copy the selection into a new layer.



To In the new layer, use the Rectangular Marquee Tool to draw a tight selection around one of the 'tip' shapes. Erase any extra pixels that shouldn't be there. Then select Edit > Define Brush Preset and name it. Now you're ready to use your new brush tip.



To Select the Brush Tool and open the Brushes palette. Go to Brush Presets and, from the bottom of the list, select your new brush. Then go to Brush Tip Shape in the same palette and set up the Size and Spacing. Also go to Shape Dynamics, and set Angle Jitter to 100% for added realism.



Quickly group layers as a layer set

Here's a quick way to group images in a nice, organised layer set. Start with a multi-layered image and select one layer. Then, in the other layers you want to link, click where you see the brush icon in the current layer – link icons will appear. Finally, drag and drop the current layer on to the 'Create a new set' button at the bottom of the palette.



Photocopy

Use 'old' analogue equipment such as photocopiers to rework your images. Print off an image as usual, then blow it up, reduce it in size, drag it while copying or copy on to acetate and then layer the results. Before computers, this kind of reworking was a valid way of putting together compositions, mock-ups and new ideas.

If in doubt, import larger than necessary

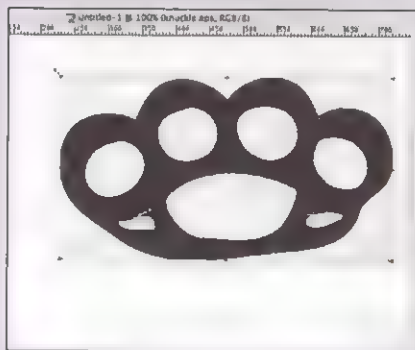


Pasting pixels

If you're pasting an object from Illustrator into Photoshop, and know that you won't need to further edit it as a vector, you can hit Copy (in Illustrator), Paste (in Photoshop) and choose Pixels. The object's bounding box allows you to set the required size, rotation and so on, and then, when you hit [Enter], it converts the graphic to a bitmap layer.

We can import graphics into a Photoshop project in a number of ways, such as by doing a simple copy and paste, or by using File > Place. When the graphic is imported, we can set the scale of the import by simply holding down the [Shift] key and dragging a corner handle of the bounding box. If you're not sure what size you'll need the graphic to be, always scale up much larger than you think you might need, not smaller. The reason? Well, when your vector graphic is pasted into Photoshop, it's converted to a bitmap image, which loses quality noticeably if scaled up, but less so when scaled down (vectors can be scaled up or down without

losing quality, one of their main advantages). So remember: scale up, hit [Return] to convert to the vector, then scale down later, if necessary.



First scale your graphic up, and convert to a bitmap. Then scale down later



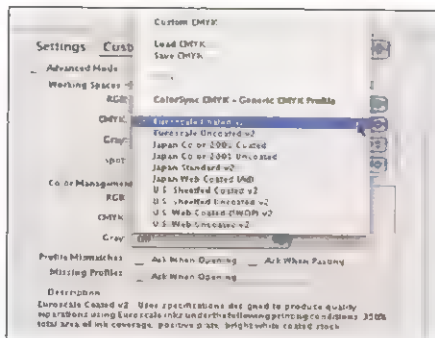
Making scanned photos larger

If you're scanning a photo, but want to later reprint it at a larger size, scan it at 600dpi. Then open the file in Photoshop and reset the resolution to 300 pixels/inch without changing the Pixel Dimensions (select Image > Image Size, then untick Resample Image and change the resolution). The Document Size dimensions will have doubled.

Photoshop is the meeting point for many projects

Photoshop is commonly used by photographers, illustrators and designers, and is often one of the first applications that we reach for when we're starting a new project,

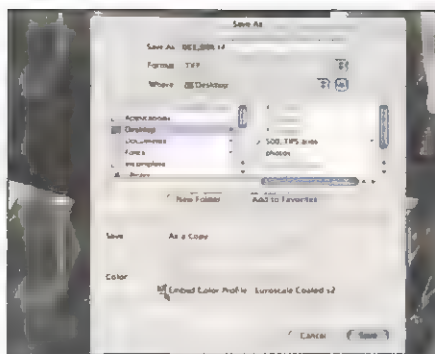
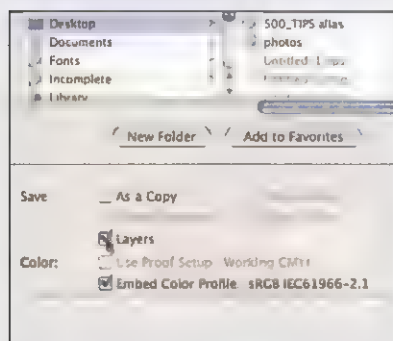
as it's what we feel most comfortable using. But it's not just a matter of habit. Photoshop is also a great central meeting point for any project where artwork is coming together from different sources. For example, you may have created some vector graphics in Illustrator, and taken some photographs with your digital camera – the two can be brought together on one Photoshop canvas. Photoshop is perfect for this, not just because of its flexibility, but also because of the way in which it deals with the job of outputting files; few applications offer the same colour management and file-saving options.



Few applications offer as many colour management options as Photoshop

Look for the Layers tickbox when saving

When saving a Photoshop file so that its layers are accessible when opened in another application such as Illustrator, look for the Layers tickbox. Select File > Save As and tick the Layers box in the dialogue if you have the option. If you don't, choose another file type, such as PSD.



TIFFs for DTP

Photoshop files saved as TIFFs can be opened by most applications, and are the preferred format for Quark, InDesign and other DTP packages. Colour profiles in the image will be recognised and used by the DTP application, so the colours will be rendered as you see them when CMYK proofing in Photoshop.

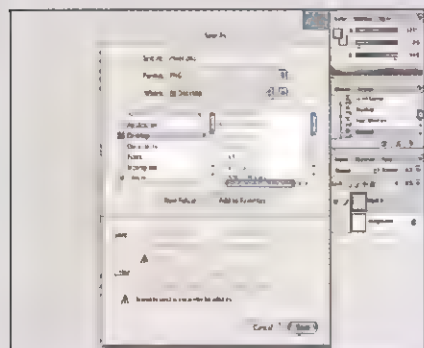


Copying layers into Illustrator

If you copy, or drag and drop, a layer from Photoshop into Illustrator, its blending modes, opacity, masks, clipping groups and other attributes won't be included. So, in Photoshop, create a new empty layer beneath your main one, then merge the top layer down into the empty one, so all those values and related layers are contained in one, single layer. Then copy and paste this into Illustrator.

Exporting feathered imagery for use in Illustrator

To export feathered imagery correctly to Illustrator, first make sure that the feathered image is on its own, otherwise empty, layer, i.e. it hasn't



If you're saving a file as a PNG, hide those background layers first

been painted on to a white layer. Then hide all layers that create a background, usually the bottom one. All other visible layers will be flattened into one when opened in Illustrator. The feathered layer should now appear to be floating over transparency. Now do File > Save As and choose PNG as the Format. Click OK and choose None in PNG Options. In Illustrator, do File > Place to import into a current Illustrator project, or do File > Open and select the file. You'll see the feathering when an Illustrator object is placed in another layer below the Photoshop-created graphic. Feathering objects in this way is otherwise very tricky in Illustrator.



Photoshop to After Effects

Adobe After Effects is used to create motion graphics for broadcast (often alongside video-editing applications). To open a multi-layered Photoshop file in After Effects, select File > Import > File. Select your Photoshop file and choose Composition from the Import As menu. You can then work with each layer separately, which makes Photoshop great for creating animation graphics.



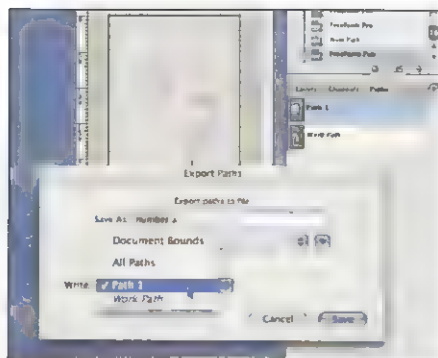
Scanned Polaroids

Don't forget that there are all kinds of photo formats. Polaroids are often square or odd rectangle dimensions, but they can be scanned and used just like any other image. You may notice that the quality isn't too great; it's probably a bit out of focus if it's just a quick snap. Use Photoshop's filters and Sharpen tools to tweak such images.



Using ink splatters

Ink and paint splatter imagery is one of those things that Photoshop just can't do as well as the real thing – so scan the real thing! When scanning such images, go for as high a resolution as possible; this will allow you to use the image at larger sizes than you originally created it, without loss of quality. When the scan is opened in Photoshop, just change the resolution to 300 pixels/inch.



Photoshop paths in Illustrator

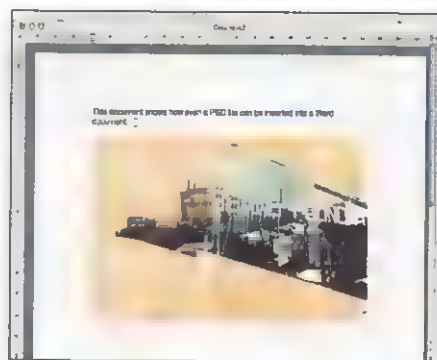
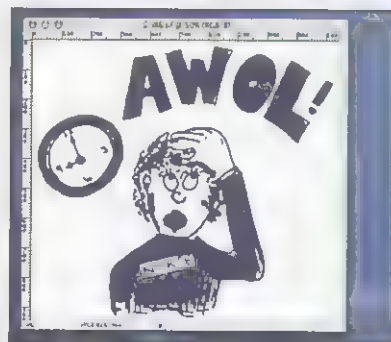
If you're using Paths for drawing in Photoshop you're going wrong; vector drawing is best tackled in Illustrator. However, vectors such as layer masks are sometimes used in Photoshop, so to export them into Illustrator select File > Export > Paths to Illustrator. You can also choose which paths to export.

You can scan just about anything, from yourself to roadkill

A photographer from Brighton won Dazed and Confused magazine's 2003 re:creation competition by scanning roadkill that he came across in the street. An inventive use of a scanner if ever there was one, his work contrasted the squashed, flat shape of the animals with paper, which is the norm. We've all seen the office high-jinks of backsides pressed on to photocopiers, but when we look at what happens to 3D malleable objects when they're pressed against the glass, this is a new way of reading them. We can read fingerprint textures and see moles, wrinkles and the like very clearly when skin is pushed flat.

Use the Stamp filter to quickly boost contrast

The Stamp filter can be used very effectively to change scans into aliased monotone images that are sharp and strong. The image here started as a simple doodle, very grey on a white background. Using Filter > Sketch > Stamp, I rendered it in dark blue and white.

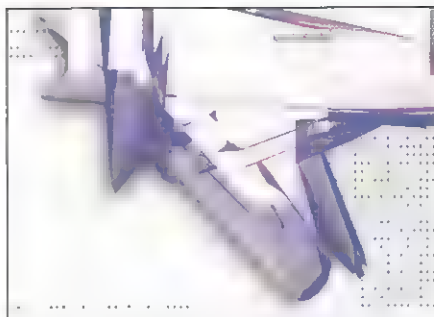
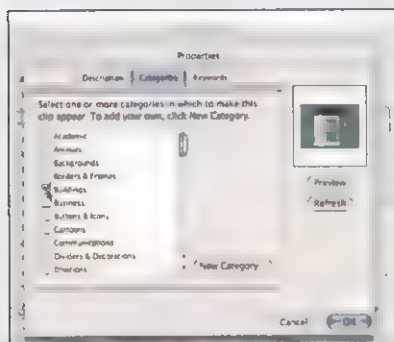


Inserting images into Word

Photoshop-created images can be inserted into Word documents. Do Insert > Picture > From File and find the required image; Word deals with most image file types, including PICT, TIFF, JPEG and GIF. Once inserted, scale the image up or down, watching out for text that might be displaced in the process.

Put Photoshop files in a Clip Art Gallery

In Word, go to **Insert > Picture > Clip Art**. In the pop-up select **Import** and choose an image – most image formats will work okay. Enter a description, and any categories you want the image to show up in when searching. Keywords can also be set to assist with searches.



One 3D object, many angles

The image you see here uses just one 3D model, which was then 'photographed' in the 3D application from various angles. Then, in Photoshop, these PICT images were overlaid and blending modes were applied. If the original object is complex enough it can be made to look very different by simply moving the camera's position.

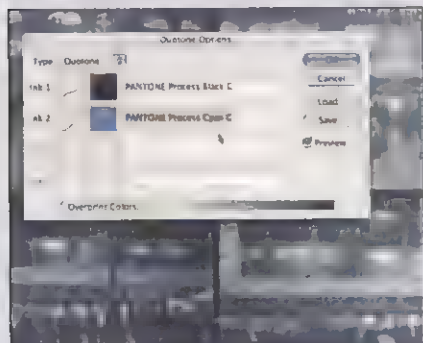


Soft focus scanning

Soft focus effects are often created by smearing Vaseline on the camera lens. So what happens if we cover a sheet of clear glass with Vaseline (or a similar product), then scan a photo through this? The effect isn't entirely the same, but an interesting way to remix an image none the less.

Producing Duotone images using curves

If a printing firm is printing a greyscale image it may be limited by the range of shades that can be printed from just one 'plate'. So a printer will



Printers will sometimes need to print duotone images using two colour plates

sometimes use two or more plates, with each plate representing a new grey or a colour tint, to stretch the range. We can create such Duotone images in Photoshop. First select **Image > Mode > Grayscale** and then **Image > Mode > Duotone**. The Duotone Options dialogue will pop up. In **Type**, choose Duotone. Having asked your printshop what colours to use, set them up – click **Thumbnail**, then **Custom**, then choose from the menus. The first colour should be the darkest (black maybe), and the second is the lighter tint colour. The curves can be edited (click the graph for each) and should be different shapes. Finally, hit **OK** and save the file as an **EPS**.



Rendering 3D object snapshots quickly

You can save stills of objects created in 3D applications, then open the PICT files in Photoshop. Save in black and white (not greyscale), at least while you're testing out how the 3D will work in your Photoshop image. You can always replace this layer with a higher-res one later.

Cropping black from around video stills

If you take stills from a video project and want to display them as normal images, you may notice that they have a slight black border – look closely. In Photoshop, untick **View > Snap** and then use the **Crop Tool** to crop the border out.



Clean up file folders

We've all done it – downloaded the contents of a digital camera into a folder on our hard drive and then realised how many dud photos were taken. To remedy this you can use the **File Browser** to delete groups of photos at a time. Hold **[Control]** (**[Command]** for Mac users) and click to select images you'd like to ditch, then click the trashcan button in the browser to delete them.



Don't use QuickTime to import into Flash

If you try to import a graphic into Flash and it gives you the option to use QuickTime to do so, don't. It usually means there's a problem with the file type you saved the file as, and this is Flash trying its best, but it will look horrible. You can try letting QuickTime do it, but if you zoom into the file to check the quality, there may be ugly marking on your flat colours. Go back to Photoshop and try saving as a different file type. PNG is your best bet, as it imports okay and will ignore invisible layers, allowing for imports which contain transparency pixels – so you could create a round button in Photoshop and import it into Flash without it appearing on a white background.



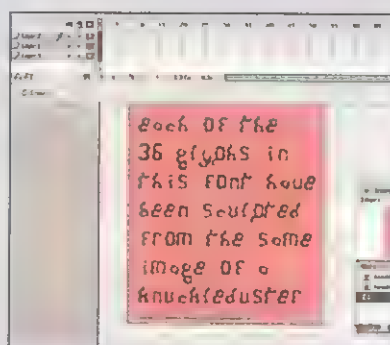
Correcting pinhole photography

If you've ever tried pinhole photography, you'll know that the end result is a 'negative' image. If your original print is small, scan it at a high resolution (600dpi) so that you can later reprint it with larger dimensions when the resolution is changed to 300 pixels/inch in Photoshop. But, more importantly, add an **Invert** adjustment layer.

Model 3D on a flat background

If you're 3D modelling and taking stills to use in Photoshop, make sure that the background is a flat colour; then you can easily select and delete it in Photoshop. You can usually set background or 'environment' colour, and also turn off any shadowing that the light source would throw on the background surface.

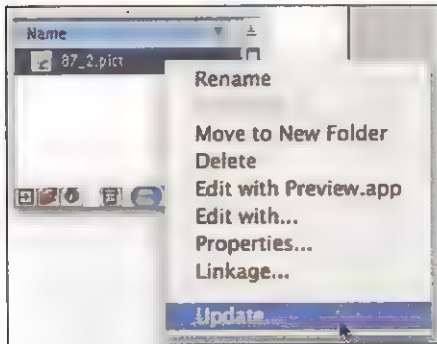
Making PSD layers available to Flash



Exporting Photoshop layers to Flash is possible, but it takes patience. First, **[Alt]**-click the eye icon of the first layer you want to export – the other layers will be hidden. Then select **File > Save As** and choose **PNG** – name the file accordingly. Repeat for all the other layers in the Photoshop file, each time displaying only the layer you want to export. Once they're all saved as PNGs, go to Flash and do **Open > Import to Library**. In the **Open** window, hold down **[Control]** (**[Command]** on a Mac) and select all the files, then click **OK**. With all the images in the **Library**, you can line them up on the **Timeline**, as each displays a bounding box showing the shape of the original image.

Update Flash library images after they've been edited

Let's say you create an image in Photoshop, and import it to Flash so that it appears in the Library. You create a whole Flash movie, using this image, but then decide that you



Flash allows you to update an edited Photoshop image throughout a project

want to edit the image; this can only be done in Photoshop. But surely this means reconstructing the Flash movie afterwards? Wrong! Edit the image file in Photoshop, and Save it with the same file name. Then, in Flash, right-click ([Control]-click on a Mac) the file name in the Library and click Update. Then click the tickbox for the file (if you see one) and click Update. This updates the image throughout the project. This is also useful for replacing one image in your Flash project with a completely different one – just create and save the image in Photoshop so that it overwrites.



PSD to FLA

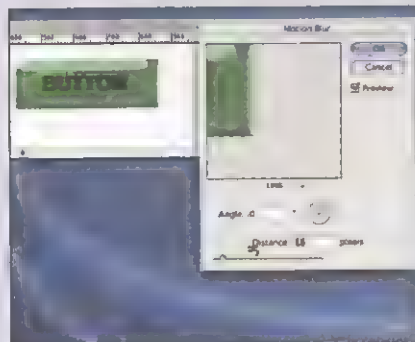
If you've created a multi-layered Photoshop file and want to export it so that all layers are preserved in Flash, you'll have trouble. There's no neat way of doing it normally. However, there's a plug-in that helps us do just this – it's snappily called PSD2FLA. You can get it at www.medialab.com/psd2fla.

Creating 'blurred' images for use in motion graphics

If you're creating a still image which will later be animated in Flash or After Effects, here's a useful tip. First create your still image, which will be used when the image is stationary. Then select Filter > Blur > Motion Blur, and apply a blur to the image to indicate the direction in which it will be moving, and save again. This image will be used to replace the stationary version when it's seen to be moving in the animation.

This effect will work best when the animation starts very fast, and also stops suddenly; for example, a button sliding from one part of the screen to the other. If the animation 'eases out', slowing down at the end of the

movement, the effect might look a bit odd, because there isn't so much blurring when something moves slowly – the eye can keep up.



Create a second, motion-blurred version of your image for use in a Flash animation



Images in Excel spreadsheets

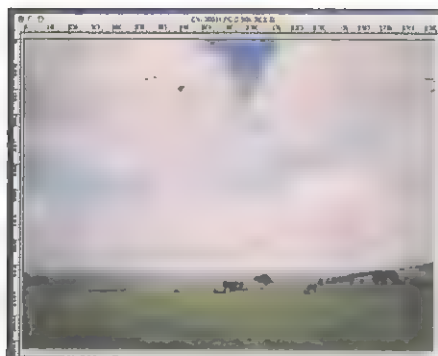
As easily as images slot into Word, they also go into Excel spreadsheet files. Use exactly the same process – Insert > Picture > From File.

However, if the image is larger than the cell in which you place it, it doesn't resize the cell, it just overlaps the edges and covers other cells, so watch out; perhaps resize your cells and layout first.



Quickly duplicate many layers

Start by linking the layers you want to duplicate and place them in a layer set. Then duplicate the layer set by dragging and dropping it on to the 'Create a new layer' button at the bottom of the Layers palette. Finally, select Layer > Delete > Layer Set and, in the pop-up, choose Set Only to remove the set, leaving just the duplicated layers behind.



Fix wind-on scratches on prints

Cheap point-and-shoot cameras may damage or scratch your film, especially if something inside catches it each time the film winds on. Select the Patch Tool, with Source ticked in the options bar. Then make a selection of the scratched area, drag it over an undamaged area, and release.

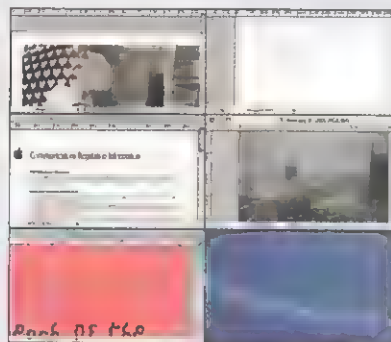


Print multiple layers on acetate

Take a typical Photoshop file with many layers. Print out each layer (hide the other layers first, then print as usual) on to a different sheet of A4 acetate, then create a frame in which you can stack the printed 'layers' again, just like in Photoshop. Leave a gap of around an inch between each sheet, to emphasise the depth.

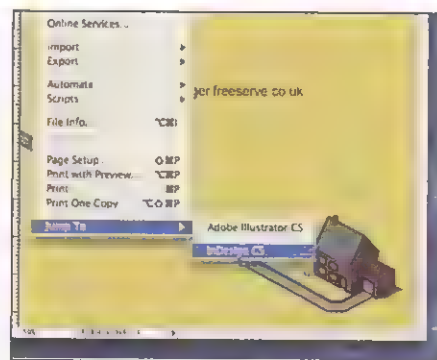
Print multiple designs on one sheet

Open several image files and print them on top of each other, on the same sheet of paper. Experiment with different types of image – photos, text, drawings, shapes or imported vectors. You could even develop new graphic ideas that you can use in later work.



How many times can you rework an image?

Start by scanning an image that you've created on paper, then in Photoshop rework it in some way. Print off the result and rework it again, this time treating the paper in a certain way, or drawing on the print. Then take a digital photograph, and import this back into Photoshop. Continue like this, and see how many times you can rework the image before it loses all sense of the original meaning... or more importantly, develops a whole new meaning. Use this process to challenge your old creative methods, and kick up some new ones. Try to ignore the boundaries between Photoshop and 'low-tech' methods – the computer is just another tool, after all.

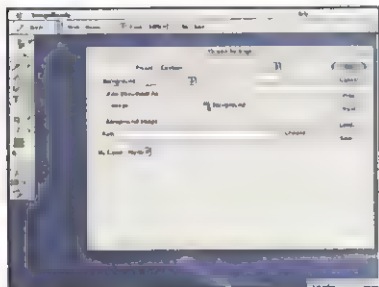


Jump To InDesign for DTP work

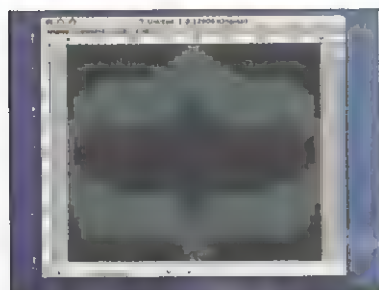
Do File > Jump To > InDesign if you're working on graphics you want to use in a DTP project. This cross-application compatibility is available because InDesign is another Adobe product, one of the main rivals to the old-school industry standard, QuarkXPress.

Create tiled web backgrounds

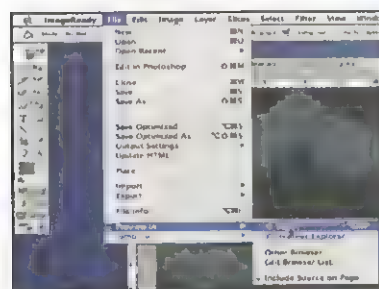
ImageReady comes free with Photoshop, and it handles web work better



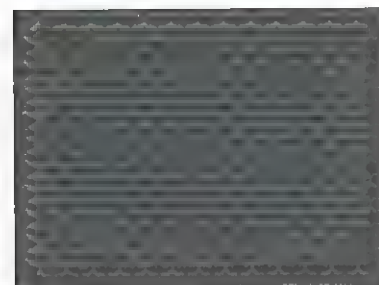
Open ImageReady, either from the application file or by clicking the button at the bottom of the Photoshop Toolbar. To make sure that we'll be able to see our pattern properly when it's previewed in a web browser, select **File > Output Settings > Background**. In **View Document As**, tick **Background**.



Start a new file, 40 pixels by 40. Now Pencil-draw a tile – a shape that will join correctly on all four edges when the tile is repeated as a pattern. Use layers as you would in Photoshop – and if you're more comfortable drawing this kind of pixel art in Photoshop, you can switch back to it temporarily using the Toolbar button.



When you think you're close to finishing, select **File > Preview In**, and choose a Browser to test the pattern in. The Browser will open, showing information about the image at the top, and the tile tessellated below. If it doesn't tile properly yet, go back and make changes.



Finally, save the file as a GIF – it should be a very small size if you haven't included too many unique colours. Then, when you make up your HTML page, set this file to display as the background tile and put all your content on top, in a set of DIV tags. You'll soon get a feel for what works well.



Print on anything flat

In the same way that you can scan a wide range of objects for varying effects, you can also print designs on to all sorts of papers and cardboard. As long as it rolls through your printer, try it: food packaging, newspaper, pages from magazines, glossy photo paper, carbon copy paper; the list is endless, and you can start designing with these output methods in mind.



Stretch your hardware

Consider the bare bones of what your hardware does, then exercise that basic function to get new results.

For example, if a transparency scanner scans transparencies, why stop at slide film and negatives? What other images are in 'transparent' form? Cine film is shot in whole reels of transparencies – 8mm, 16mm, super-8, and so on.

Using transparency scanners for more than just slides



Use Photoshop to enhance

We've all seen it in movies; image-editing software used to enhance grey, faded, barely-there imagery. This is where the blending modes come in useful – use Multiply to 'pull out' images from soft rubbings or scratched paper, or Screen to clarify night photography. You can discover new shapes, textures and marks in the most unlikely of places.

Slide or transparency scanners can be used to transfer photographic slides to your computer so that you can work with them in Photoshop. Simply position your slides inside



Many flatbed scanners offer combined slide and negative scanning capabilities

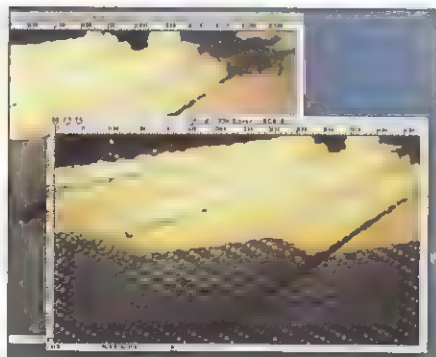
and let the high-resolution scanner do its work. Most modern scanners can also be set up to scan the film negatives that normal prints are produced from. In some cases they will even invert the colours for you; if not, select Image > Adjustments > Invert within Photoshop.

If your scanner allows it, try scanning transparencies such as sheets of acetate on which you've drawn or painted. The hardware is able to scan in so much detail that it can blow tiny slides up to produce larger images, so just imagine what sort of detail can be found in even a simple brush stroke.



Light spots

Digital cameras sometimes create odd light spots and reflections that you might not notice when checking on your LCD display – but they show up all too well in Photoshop. Try removing them with the Clone Stamp or Healing Brush tools.



Use textures from photography

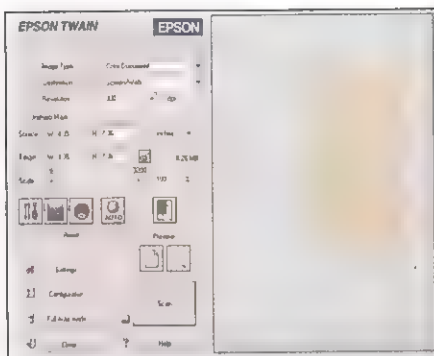
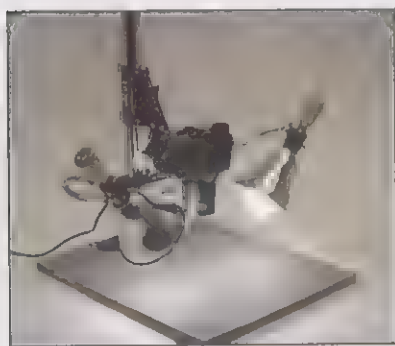
Take photos of textures found in walls, flooring or landscapes, and then use them in your artwork. When blended into an illustration, as shown here, they can add a very real dimension to the piece. Use a blending mode such as Overlay, Screen or Multiply to do this.

Play 'image tennis' to inspire creativity

You may have heard of 'Photoshop tennis', which involves one person working on an image or illustration, and then passing it on to someone else who will develop the piece further, before they return the shot. The idea is to remix the image so that it's read differently each time – this is a great exercise for keeping ideas and creativity flowing smoothly. Taking the process to its logical extreme, you can make use of any application to work on images, not just Photoshop. Also try working with 'real art' materials from outside your computer. Discover new ways of working with everyday applications and tools – then apply these new skills to your professional work.

Use a copy stand to take photos

If you regularly photograph objects and paperwork (perhaps as an alternative to scanning), consider using some kind of 'copy stand'; a camera grip that points directly down at your subject, using attached lights. Create your own, or buy a professional grip, as shown.



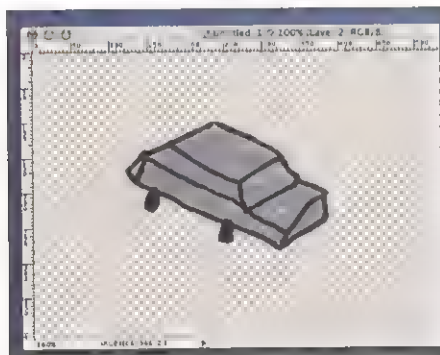
Scan only the area that you need

If you're using an A4 scanner, but your image only covers a small area of the bed, many scanners will allow you to specify a smaller scanning area. This will mean that you're not kept waiting for the whole page to scan, and also that you'll have to do less cropping in Photoshop.



You can't scan money!

If you try scanning banknotes in Photoshop CS, you'll be in for a shock. Adobe has built in a feature that prevents images of currency being reproduced. Obviously this is intended to stop forgery, but it's worth knowing, in case you were planning to use such an image in your artwork.



Make 'roughs' for animation

If you're creating stills or layers for an animation, consider starting out by organising the animation in After Effects using 'rough' Photoshop versions of the image. Then, back in Photoshop, you can produce the final, detailed artwork, and update the respective 'roughs' in your animation file.

Using 'screen grabs' in your artwork

You can 'grab' a screen image in a variety of ways. On a PC, hit the [Print Screen] key, or use [Alt]+[Print Screen] to snap only the current window. On Macs use the bundled Grab software – [Command]+[Shift]+[3] to grab the whole screen and [Command]+[Shift]+[4] to grab a section. Now open the image in Photoshop. You'll probably want it larger than the original 100% grab, unless the artwork is for the web. Do Image > Image Size and blow up the Pixel Dimensions by a percentage, using exact multiples of the original pixels, for example, 200%, 300% or 400%. Also set to Bicubic, so that the image pixels, and therefore the edges, are kept sharp.



Maintain image source libraries

In the same way that you might keep a CD back-up of your photographs, hold on to any scans or photos of textures, shapes and so on that you may find useful in the future.

Chapter 6

GETTING INTO PRINT – AND ON THE WEB

We've looked at a variety of production techniques and tips, but it also helps to know how to promote and distribute your work, both on the web and as 'hard copies'

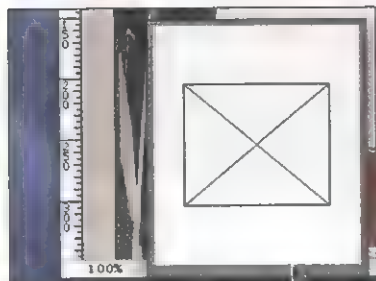
Over the course of this Focus Guide we've seen that Photoshop is a powerful tool that can help us to produce some really amazing artwork, designs and photographic enhancements. But the Photoshop adventure doesn't end with the finished work – it still has to be 'put out there', whether it's being printed in a magazine or uploaded to a website. In this chapter we'll pass on some tips that will help you when it comes to distributing your work.

Get wise to the web

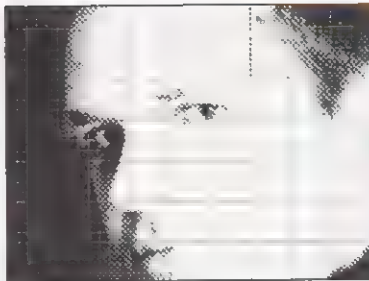
There are two main ways of getting your work seen – online and offline;

in other words, putting it on the internet or producing 'hard copies' of your work in the form of prints or CD-ROMs.

Since the birth of the internet people have been showing off their artwork on web pages and sending it via email, and, as the everyday surfer catches up with technology, this is an increasingly effective way of getting your work seen. We'll take a look at some of the tips that will help to make the process of getting your work on the web easier, both for you and for your target audience. Photoshop has a few tricks up its sleeve when it comes to dealing with web imagery, but it's also well worth



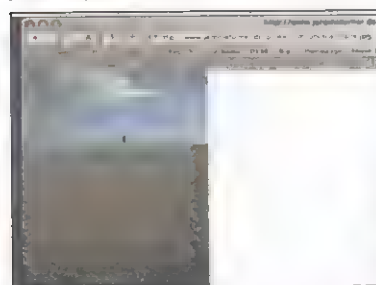
Page 111 Discover quick ways to preview your printouts



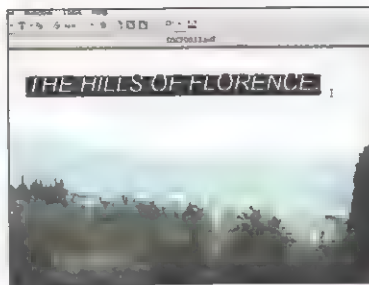
Page 112 Learn how to make huge posters by rasterbating images



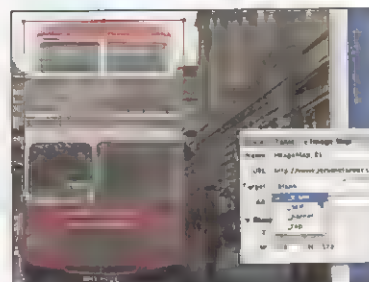
Page 114 Make a simple screen for printing or spray-painting artwork



Page 115 Learn how images are stored and viewed on the web



Page 117 Create PDFs with text that remains selectable and copyable



Page 121 Use ImageReady Image Maps to create 'clickable' hotspots

checking out the program's sister application, ImageReady, which comes bundled with Photoshop.

Prints and discs

Offline work can be output in a number of ways. Typically, designs or illustrations will be printed and, whether this is done at home on your A4 inkjet printer or sent to a client for a larger print run, we'll look at how you can ensure the process runs smoothly. Are you framing your work? Do you want to save your ink cartridge? Want to add crop marks to a 'bleed' design? Then read on. Photoshop can also be used to prepare images for other formats,

such as CD-ROMs, so we'll take a look the use of various file types.

Just the beginning...

We can't give you all the answers, but this Focus Guide should inspire you to explore Photoshop further. What can you achieve with the tips and techniques we've unearthed here? Well, maybe you won't find a use for all 500 tips, but there's certainly a lot to work with – and you can discover even more for yourself. It's just a matter of working regularly with Photoshop until one day, without even realising it, you'll find yourself instinctively using all the tricks and shortcuts that you've learnt.



Try out your work on web communities

If you're creating work that's aimed at the web, put it online and ask people on web community sites to take a look and see what they think. Make sure these communities can be trusted, will give you worthwhile feedback and won't blow your cover to your client or target audience before your work is finalised.

Display your spot colour only

When adding a spot colour channel to an image (a special coloured ink printed on a separate plate) you can display the colour on its own. In the Channels palette, click on the top, composite RGB eye icon to hide that channel and the Red, Green and Blue channels.



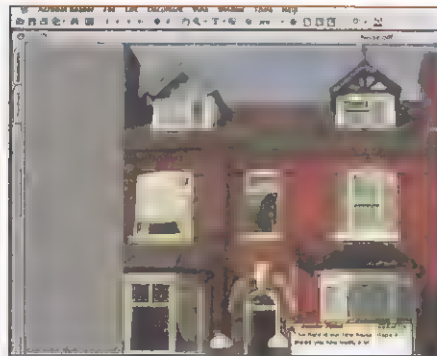
Don't take Save for Web literally

Although this Photoshop function is great for creating web images, it's also useful for any scenario that requires small image files, but with image quality retained; for example emailing a thumbnail image. It's the only saving method which enables you to compare a 'before' and 'after' image, and see that JPEG compression up close.



Create a video portfolio

If your client is used to working with video, create a personalised VHS portfolio. Make sure you export your images as RGB, and at the same dimensions as your video project, then reopen the files in After Effects or a video-editing application and create an animated slide-show presentation.



Add readable notes to PDF files

First use Photoshop's Notes Tool to add a note – just click on the canvas and type, then close the window on the canvas. Then go to Save As and choose Photoshop PDF, with Annotations ticked. When the file is opened using Acrobat Reader, the user can click the icon to open and read the note again.

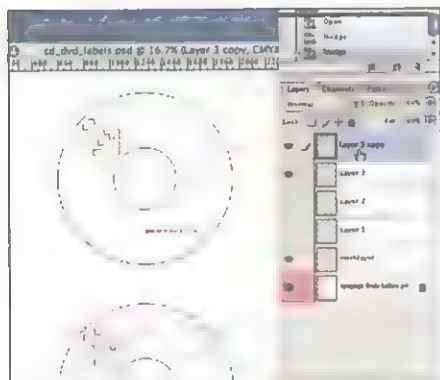
Different clients, different portfolios

When you're meeting clients for the first time they may want to see a portfolio of your work. You might want to put some images online, so the client can see the images before or during the meeting – especially if the work you're 'pitching' for is aimed at the web. To do this Select File > Save for Web and save your images as well-compressed JPEGs and/or use the Automate > Photo Gallery function to create a simple portfolio site.

Alternatively, save higher-res images to a CD-ROM or laptop which you can take with you to the meeting. Consider your client's needs and office set-up – if they don't use computers on site, print up some examples.

Download CD sticker templates

If you're putting your work on to CDs you'll want to label them. You can buy stickers backed on an A4 sheet which peel off, and depending



Downloadable CD templates make life easier when you're creating labels

on who makes the brand that you're using, you should also be able to download templates which can then be opened in Photoshop so you can design and lay out a label. The template's CD outlines go in one layer, the artwork goes in the other layers above, and you can hide the outline layer when printing on to the sticker sheet. You can even design with a bleed that runs off the edge of the label, because an A4 label page usually only contains two labels, leaving plenty of margin space. Try www.neato.com, for templates; click on Downloads and Software, then Mac/PC Templates.



Gloss or matt?

Decisions, decisions. Photos can be printed on to strong, high-quality photo paper, but should you go for a matt or gloss finish? The price is usually the same, so it's a matter of personal preference. Gloss can annoyingly reflect light, making it hard to see the image properly – but if it's going under glass in a frame anyway, this isn't an issue.

Create limited-edition printed artworks

Just because you've created a piece of artwork using Photoshop, that doesn't mean that it's any less valuable than a 'traditional' painting or a sculpture – but don't distribute hundreds of copies to everyone you know. Photographers who sell their pictures work from a negative which can be used over and over, but they don't sell copy after copy of the same photo. Rather, they may produce 10 or 20 prints, and mark each one to indicate that they're part of a limited edition. If you're exhibiting and selling digital artwork, you can similarly label your work. Make sure that you leave some kind of white space around the image, and either label each print

using the Type Tool before printing, or, if you're having your work printed professionally at a print shop, do so afterwards with a pencil.



Digital artworks can be worth thousands, especially as limited editions



Avoid paper that's too absorbent

You may not come across this until you start printing on a piece of paper, but some papers will absorb ink more than others, so the sharpness and definition of your image will be lost as the ink soaks into the page. Try using a heavier 'weight' of paper, more like a card.

Slice images in ImageReady

Using Slices, we can divide an image destined for the web into sections for faster loading



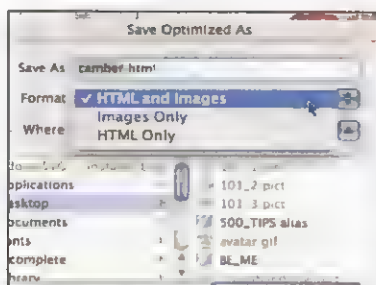
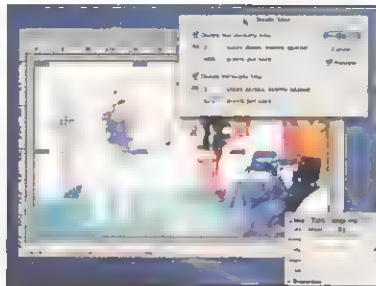
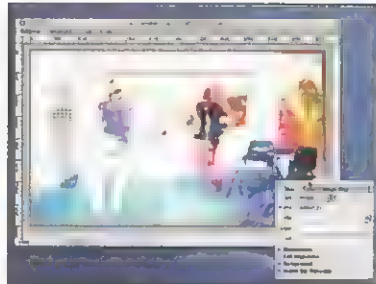
Rasterbator online

If you can't be bothered with the lengthy process of creating 'blown-up', rasterbated images in Photoshop, you can upload an image to <http://homokaasu.org/rasterbator> – it really does take all the hassle out of rasterbating. From upload to final print-out takes around a minute, and there's even a gallery of past efforts.



Identifying images on the web

With so many formats like Flash and QuickTime on the web these days, it can be tricky just figuring out what images are JPEGs or GIFs that can be downloaded from a page for editing in Photoshop. Try 'grabbing' and dragging the image off the page – the cursor should show the image moving with your mouse.



Start by opening a large image that you want to use in a web page in ImageReady – typically this might be an introductory 'splash' page for your website. The benefit of slicing this into sections is that it will generally load quicker. Do **Window > Slice** to show the Slice palette, and select **View > Show > Slices**.



You'll see that the image is already treated as one slice, with a border and number in the top-left, and the name in the Slice palette according to your filename, in this case **camber_01**. Do **Slices > Promote to User Slice**, then do **Slices > Divide Slice**. In the pop-up set to **Divide Horizontally into 2 slices down** and **Divide Vertically into 3 slices across**.



Click **OK**, and the image is sliced. That's the easy way, but you can also **Slice manually**. Do **View > Snap** and **View > Snap to > Slices**, and also use the **Slice Select Tool** to click off the edge of the canvas to deselect any selected slices. Then, using the **Slice Tool**, draw a marquee to cut a slice within a slice, snapping to the edges.



Note how more rectangular slices are made up around the new one you just created, like a jigsaw. Finally, do **File > Save Optimized As** and set **Format** to **HTML and Images**. This saves an HTML file, and an 'Images' folder containing all the slices, all of which need to go online in the same folder (or directory).

Design a professional-looking case for your CDs

If you're compiling a presentation for a client on a CD-ROM – or even if you're just burning a music CD for yourself, or for a friend, you may want to produce a professional-

looking CD case to finish the job. You can use slim 'jewel' cases, the standard music CD type or a variety of other options, such as those found at <http://5inch.com>.

Whatever style of case you use, you'll probably want to design an insert card of some kind. The easiest way to find the sizes you need is to pull apart a similar case and measure all the dimensions. Then, in Photoshop, create a canvas with some extra bleed around the edges if your design will 'run off'. Use Guides (View > Show Guides) to show where the folds will occur. Then get designing!



Those nice people at 5inch.com offer various casing options



Print One Copy quickly

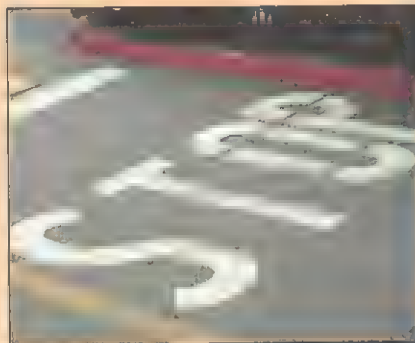
If your print options are already set up as you need them, you can bypass print-related dialogue boxes by selecting File > Print One Copy. Do make sure you have everything set up correctly first though!

Manipulate images to take into account how they'll be viewed

Next time you're driving around town and come to a STOP sign painted on the road, take a look at it from the side; the text is painted long and narrow to accommodate for the viewing angle – from the driving seat, it's foreshortened.

Most of the time, your designs will be viewed head-on, but not always. Look out for scenarios in which people will be viewing from an angle, and adjust your image accordingly. The easiest way to do this is to flatten the image into one layer, then do Image > Image Size. Then untick Constrain Proportions and reduce either the Height or Width dimension (you could enlarge either dimension, but you'll

lose image quality). Or, to see what's going on, enlarge the Canvas (Image > Canvas Size) and then select Free Transform (Edit > Free Transform).



STOP signs like this are elongated for a reason – so that you can read them from your car



Check aliasing on paper

If you're not sure which aliasing option to select when using the Type Tool, try printing off a test image using each setting, to compare print quality. Also try different type sizes, as this will affect how text is aliased. You could even make a whole test sheet printed on to 'typical' print paper, and keep this as a permanent reference.

Create a spot colour channel for printing



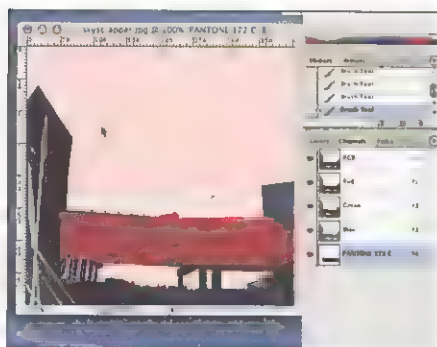
Print on the right side

Some printing paper, such as photo paper, has a different-quality finish on one side, so make sure you put your paper in the printer the right way up. Likewise, if you're printing on both sides of a piece of paper, make sure the paper is the right way up when you feed it back in for the flip-side print.

This is something you're unlikely to get involved with in 'home' projects, but if you're sending your work to a print shop and you're asked to submit graphics in separated colour

channels, you can do so in Photoshop. Then, when the image is colour separated in the printing process, the spot colour channel will be printed from its own plate.

Start with an image to which you need to add a spot colour and, in the Channels palette, pick New Spot Channel from the fly-out menu. Click on the Color thumbnail and select a colour – click Custom to open specific industry colours. Solidity sets the transparency of the spot colour. Click OK to confirm. Finally, select the Brush Tool, check that the new Spot Color channel is selected, and paint.

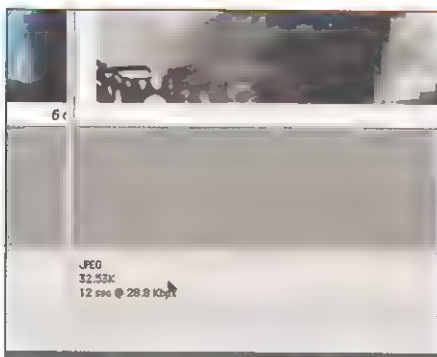


Create spot colour graphics that will be printed on their own plate



Saving images with spot colours

If an image contains spot colours it needs to be saved in a way that print shops will recognise, so that spot colours can be printed from their own plate – a process known as color separating. Do File > Save As and then select the Format DCS 2.0, making sure that Spot Colors is ticked.



Submitting images to websites

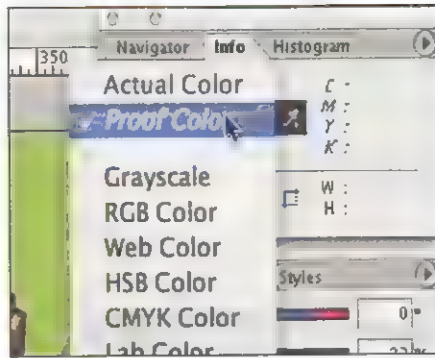
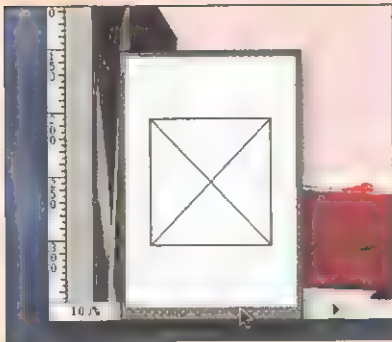
If you're sending an image to a website and a maximum size is specified, use Save for Web. The site will usually want a JPEG or GIF, and these can be set here. You can also see the file size at the bottom of the Optimized view, and adjust the Quality if necessary.

Print out proofs containing spot colours on one page

If you try printing a rough proof of an image that contains one or more spot colours, you'll see that each spot colour is printed out on a separate page – in effect, separating the colours. To get around this, first save your image in its unmerged, separated state. Then, to print a quick proof showing all the channels together, select the spot colour in the Channels palette and, from the palette menu, select Merge Spot Channel. Once all the channels are merged, print a copy. If you're happy with the result, revert to the unmerged, saved version and send this to the printers.

Preview the print size using the Status bar

Click in the Status bar at the bottom of your image and hold the mouse button down, and a preview image is displayed, showing how the current size will print on a page. This also depends on what kind of page set-up you've specified in Photoshop (File > Page Setup).



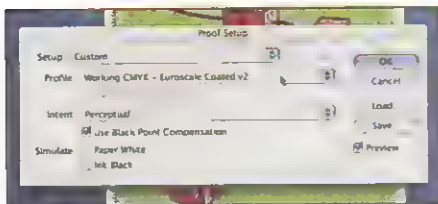
Check colours with the Info palette

Open the Info palette. Click the right eyedropper icon and, from the menu, select Proof Color. Now, when your cursor runs over an image colour, the ink percentages needed to mix that colour will be displayed, according to the Working Proof set-up as specified in View > Proof Setup.



Stacking spot colours

If you add spot colour channels to an image, appreciate that they will overprint the other image colours, so you can't stack a spot colour channel under the other colour channels. However, you can change the stacking order, and therefore the order in which spot channels overprint each other.



Proof a RGB image as CMYK

Open your RGB file, select View > Proof Setup and check that CMYK is ticked then, from the same menu, select Custom. This will show the CMYK Profile as set up in the Working Spaces Color Settings, but you can reset it, according to where it's being printed; check with your print shop. To view the proof on screen, tick View > Proof Colours. With any luck the colours will only change a little, and should need very little, if any, adjusting.

Print out proofs at home first

If you're sending an image off to have several thousand copies printed at a commercial print shop, print off a proof at home first. OK, so perhaps the colours won't look exactly the same as when they're printed properly, but you can at least do a rough check, and make sure that everything is in place as it should be.

This includes 'idiot checks' for mistakes you don't notice during the on-screen design process (such as spelling mistakes), but which may be glaringly obvious once you see them on paper. If you're inserting data that doesn't mean anything to you (prices, dates, and so on) double-check the original content provided by your client.



Fix out-of-gamut colours manually

Out-of-gamut colours are those which are 'unprintable' – your printer will adjust them slightly to cope with saturation or brightness problems. But you can fix these colours yourself. First select View > Gamut Warning to show (as grey) where these colours occur. Then do Select > Color Range and in the Select: drop-down menu choose Out of Gamut. Finally, desaturate the colour in this selection using the Sponge Tool.

Create a giant poster in A4 prints

This method combines high-tech design with lots of good old-fashioned sticky tape!



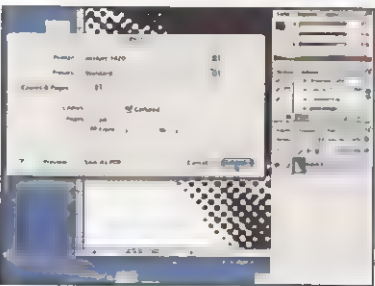
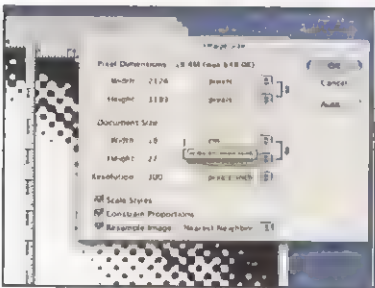
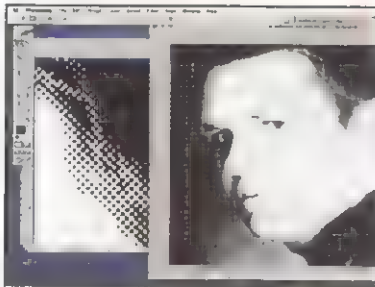
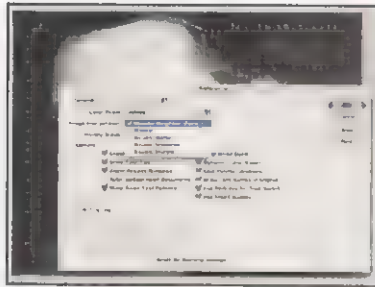
Make maquettes

If you're producing designs for packaging, it might be a good idea to print off a sample at home and make your own maquette model. Even though this kind of thing probably isn't your responsibility, if you have extra time to anticipate problems, your client will be impressed. Make sure that the net works, and that folds are in the right places.



Technical information

If someone starts asking technical questions about how you took a particular photo, Photoshop may be able to come up with some of the answers. If you select an image in the File Browser, the Camera Data (also known as Exif) tells you the camera Make and Model, Exposure Time, Shutter Speed, f-stop and so on.



Start with a clear, simple image that will look good as a poster – perhaps a portrait. Select **Filter > Sketch > Halftone Pattern** with **Contrast** set to 50 to render the image in sharp black and white. In the Photoshop Preferences, change the **General > Image Interpolation** setting to **Nearest Neighbor**. This will ensure that the image retains its sharpness when it's blown up.



Select **View > Show Grid** and then **View > Snap to Grid**. Then select the **Rectangular Marquee Tool** and make an A4-scale selection from the Grid. Copy this, then start a new file, and paste. Save the file, then move the marquee along; repeat the process until you have many files that will fit together to create the poster.



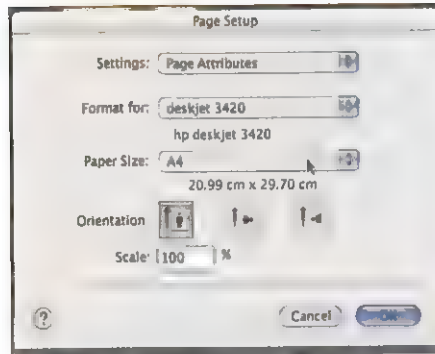
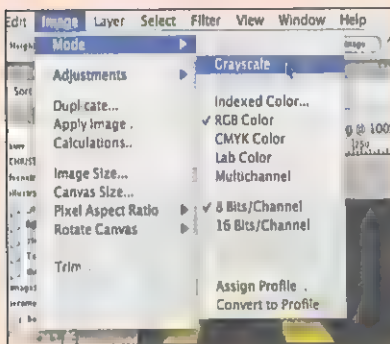
Each new file needs blowing up to A4. As this is a repetitive job, let's create an Action. In the Actions palette, hit **Create New Action**, do **Image > Image Size** and blow up a segment's dimensions to cover an A4 sheet. Then stop recording the Action, and use the **Automate > Batch** function to repeat across the folder of images.



Once this is done, you need to print out all the images and stick them together. You could print each segment manually, or create an Action which prints each image in a folder in succession.

Does it need to be in colour?

If you're sending/sharing images on the web, consider how important it is for those images to be in full colour. Or, more to the point, does it matter if they're greyscale, because if they are, this will dramatically reduce the file size. Select **Image > Mode > Grayscale** to convert.



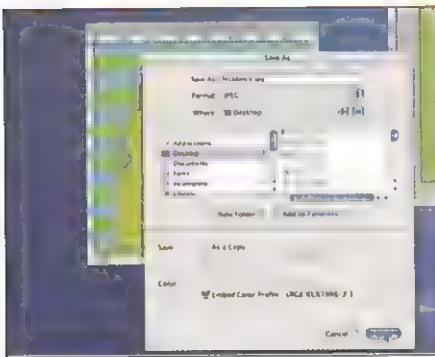
Always check your Page Setup

Before printing an image, check that the Page Setup is correct. Do **File > Page Setup** and specifically check the Paper Size (A4 is standard) and Orientation, depending on whether you're printing a 'landscape' or 'portrait' shape. Once you've wasted that expensive ink a few times you'll soon learn to check regularly!



Is your text legible?

If you want people to read text that you create, make sure it's actually legible! So print off a proof first; is it easy on the eye? Does that typeface work, or is it too flouncy for such a large paragraph? Also keep in mind that your proofing printer and paper may not accurately simulate the professional printer.



Preparing graphics for CD-ROM designs

When we save web images, file size is a big issue. But CD-ROMs can store a lot of hi-res images which can be accessed very quickly, so compression is not such an issue. This means we can usually just do **Save As**, without going through the whole **Save for Web** process.

Create a stencil for a simple T-shirt design

Start out with a simple design rendered in black and white – you can quickly create this effect by applying the **Stamp Filter** to any image. Keep in mind that you'll need to cut out the black sections of the image, leaving the white sections on the paper, so this will limit how intricate your design can be. Then print the image on to heavy card, and use a scalpel to cut out the black sections (of course, you can use any colour you like for the T-shirt). Flatten your T-shirt on a board, tape the stencil over it, using newspaper to mask out the rest of the shirt, and spray the stencil using a fabric spray – car spray paint will do fine, but make sure you've got a window open!



Leave white margins for framing

If you're printing on to paper for framing, make sure you leave a white margin around the edge of your image. Then you can cut a frame of mount board using this as overlap. Select white as the background colour, then use the **Crop Tool** to select the whole image, and holding down [Shift] and [Alt], drag out a corner point. Hit [Enter] when the border looks right.

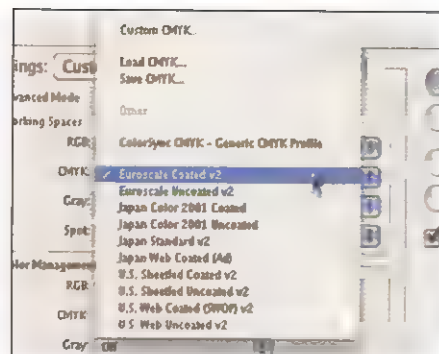
Stencil interior décor

Print your Photoshop design on to card, and cut it out as a stencil for printing on curtains or walls. If the stencil base is a rectangle or square shape you can easily line up rows by marking the corner positions and then moving the stencil along.



Photocopying is cheaper

If you're making multiple greyscale printouts of an image it will be cheaper to print one copy and then photocopy that. The quality won't be as sharp, and you may have to go to a copy shop, so it depends on your budget and needs. If you're just mailing out a party invitation or map of directions, it's certainly worth considering.



Speak to the printer, not your clients

If you're producing Photoshop artwork for a large client, your usual contact may know nothing about colour management or settings. You really need to speak to the person in charge of the printing process, so you're both clear about what you're supplying them with.

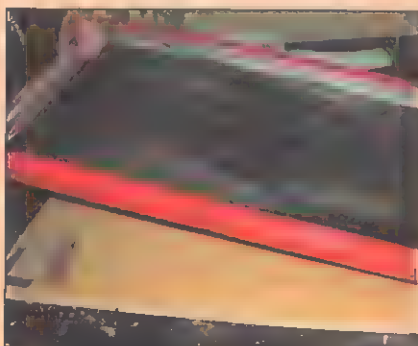


Are you viewing proof colours?

You can easily tell whether you're viewing an image with Proof Colors ticked (so you can see a preview of the image in CMYK, for example). The document's title bar will show you; (RGB/8/CMYK) means the image is actually an RGB 8-bit one, but currently being proofed as CMYK.

Producing screen prints from Photoshop images

As with our T-shirt stencil, start out with a Photoshop image rendered in just black and white – if the image that you want to use is in colour, apply the

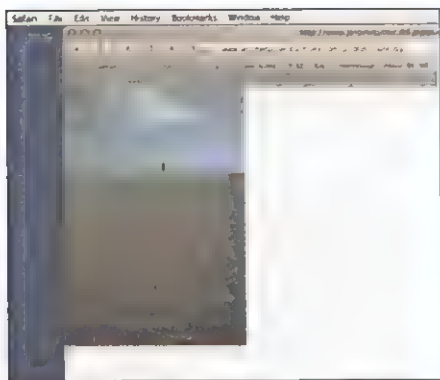


Go to www.artrujillo.com/screenprint.htm for more images from the arTrujillo Gallery

Stamp filter. Then print the image on to a sheet of fine but strong card. Now you need to make or buy a printing frame – this is basically like a stretched fabric canvas, but with a thin gauze material, instead of canvas, to let the paint seep through. Place it on a surface with the wooden frame facing upwards, and the gauze flat on the surface. With the printed side facing up, back the design on to double-sided adhesive paper, then stick the whole sheet on to the gauze. Now comes the fiddly part – cut away the black part of the design and the adhesive, leaving the gauze unscathed. Finally use a spray can, or a wiper board and paint, to print your design.

Quick browser preview in ImageReady

If you're working on an image using Photoshop's sister application ImageReady, you can quickly preview it in a web browser – simply click the browser icon near the bottom of the Toolbar. To choose a different browser, hold down the button, then choose from the list.



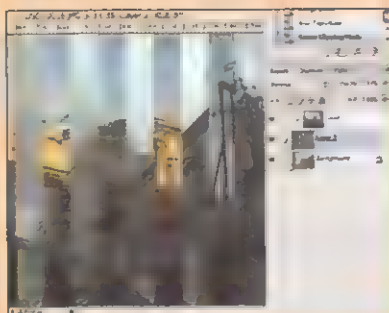
Viewing images on the web

If you put an image on the internet, it will have its own web address. You can type this into the address bar of any online web browser, and the image alone will be displayed in the browser window (once it has loaded), flush to the top-left corner, and at 100% size.

Hyperlink to web images

If you're emailing someone to send them a link to an image on the web, use the syntax **http://www.mysite.com/mypic.jpg**. The **http://** is important, as it converts the address into a clickable link which will automatically open the image in their default browser. This text will appear blue when your recipient reads the email.

Create a concertina double image



Start with two contrasting images to make the concertina from; they should be the same size, and stacked in consecutive layers. Then, as shown in the Layers panel in the image here, create another layer which contains black and transparent columns of equal width. Place this under the top image, then select the top image layer and select **Layer > Create Clipping Mask**. The column layer then acts to mask the top image layer. Then print the image off and fold it along the column edges, making each fold 90 degrees so that when you view the concertina one angle you see the first image, but when you view it from another angle, you see the second.



Print T-Shirts using transfer paper

You can put your designs on to T-shirts using transfer paper designed specially for the job. There's one thing you need to remember before printing your design on to the paper – you need to select **Image > Rotate Canvas > Flip Horizontal** so it prints in mirror image. This is applied to all the layers at once, so there's no need to flatten the image first.



Screen sizes vs. image sizes

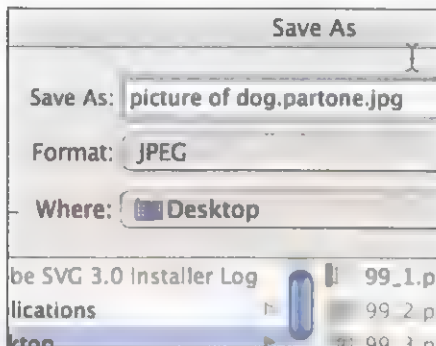
If you're saving an image that will be displayed in a web browser, make sure its dimensions aren't larger than a typical screen size, otherwise anyone viewing it will have to scroll around to see the image. Around 50% of surfers use a screen that's 1024 pixels by 768, but a further 25% are only viewing at 800 by 600.

Problems with sharing images between computers



Opening troublesome files

If double-clicking an image file on your computer doesn't open it correctly, try opening an image-viewing application first; Photoshop is perfect, as it can work with so many different file types. Then select File > Open and browse for the image, and it should open okay.



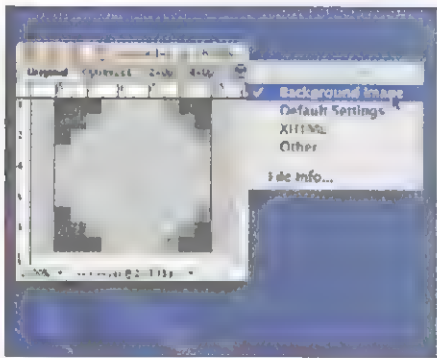
This is a bad, bad file name – don't use punctuation, characters or spaces

emailing or transferring files from a PC to a Mac, or vice-versa. You can help matters by naming your files correctly. Don't use spaces in file names; if you need a space, use the underscore character, for example my_pic.jpg. Also avoid using other unusual characters, like punctuation marks or symbols. If you receive an email which apparently contains an attached image, but you can't open it or see it, try hitting the Forward button in your email software. Then see if you can open the image from this new message document. If not, ask the sender to email it again, making sure it's a JPEG or GIF.



Lifting images from the web

If you're saving a website image to your desktop, first of all make sure that you're allowed to. Is the image copyright-protected? To save it, right-click (Mac users [Control]-click) and choose something like 'Save Image to Desktop'; depending on which browser you're using, this wording may differ.



Previewing tiled patterns quickly

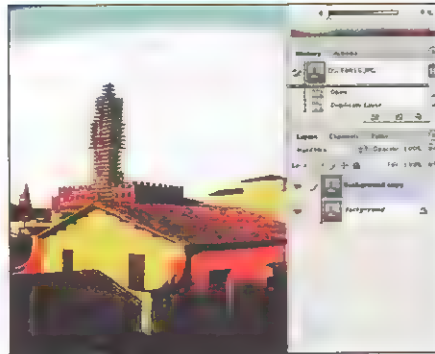
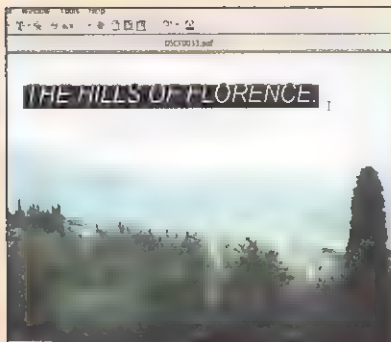
In ImageReady, click to open the menu at the top-right of the document window, and choose Background Image from Output Settings. In the toolbar, hit the Preview in Browser icon at the bottom – the image will preview as a background pattern which can be used in a website.

Creating a Picture Package

When you're printing out images, you may want to produce multiple copies of each image on one sheet, which you can then cut out and distribute to family, friends or clients. Start with your image, or Folder of images, and select **Automate > Picture Package...** then set up the Source Images section of the window accordingly. Enter the Page Size and Layout (the number in the brackets denotes how many copies will be reproduced on each page). Set the Resolution to 300 pixels/inch and finally add a label, which will be reproduced over each copy of the image on the page layout. Hit OK, and the layouts will be created and opened in Photoshop.

Make PDF text selectable

You may want to save a PDF which contains selectable (and copyable) text. First flatten all non-text layers, then do File > Save As and choose PDF, with Layers ticked. In the PDF Options, click OK. Open the file in Acrobat Reader and use the Text Select Tool to select and edit text.

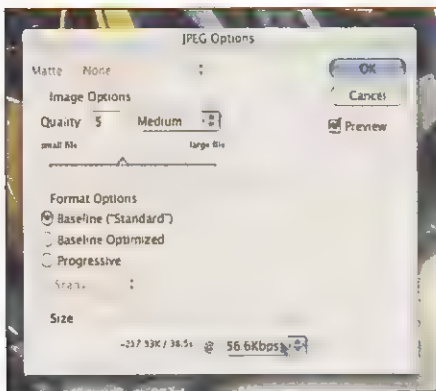


Make simple, small posterised images using Hard Mix

The new Hard Mix blending mode in Photoshop CS posterises images so that they're made up of just a few unique colours. Duplicate your image, change the top layer to Hard Mix mode and then save as a GIF, as this format compresses images with few colours especially well.



Creating Progressive JPEGs
Whenever you save a JPEG file, you'll be presented with the option of making it 'Progressive'. This means that when it's opened (downloaded to a browser) online, the image is gradually revealed over a number of scans (between three and five). The advantage of this is that the image appears quickly, with each scan improving the quality.



Saving JPEG images

Select File > Save As, choose the JPEG format and click Save. In the JPEG Options, move the Quality slider and, as long as the Preview box is ticked, you'll see the change applied to your image. You'll also see the new file size and download time at the bottom of the window.

Catch the viewer's eye from afar

If you're creating an image that's going to be viewed from a distance – perhaps a large poster, or an artwork that will be displayed in a gallery – make sure that you catch and hold the audience's attention. Every day we're bombarded with bright, visual imagery in packaging, television, magazines, advertising and the like, so to make something stand out, you really have to go the extra mile. Explore Photoshop's wide range of filters to look for that new, unique mixture of effects. Or use the Blur and Sharpen tools to draw attention to particular parts of your image, such as the eyes in a portrait. Also use bright colours effectively, but without making your image overly garish.



Update with the same name
If you're updating an image that appears on your website, save it with the same name and extension. Then, when you next go to put the new image up using your web design software, all you need to do is upload the updated image, and all HTML pages that used the old version will now use the updated version.

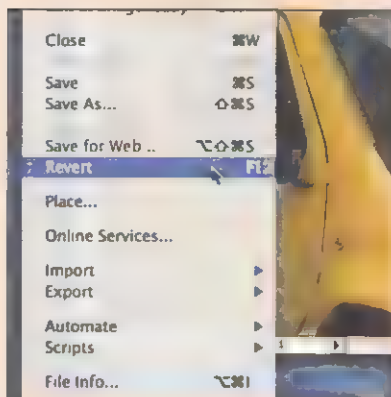
Revert to your original after making changes

If you make changes to an image and then wish to return to the last 'saved' state, select **File > Revert**. This is especially useful if you alter a file and then create an exported version using **Save for Web**.



Viewing PDFs online

If you put a JPEG image's web address into a web browser, it will be displayed in the browser. If you do the same with a PDF, it will be downloaded and/or opened using Adobe Acrobat Reader. Similarly, if you create a hyperlink to a PDF, it automatically downloads to the user's desktop, so it's polite to warn them first.



Optimise images in ImageReady



Be careful with TV images

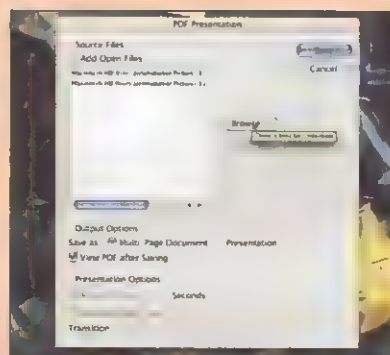
If you're creating imagery that will be viewed on a TV screen, beware of using very bright reds, purples, and so on, as they will bleed into other parts of the image. Also beware of using tight repeating patterns or checks; these can make for uncomfortable viewing if used in motion graphics.

In Photoshop, we have the **Save for Web** window; in ImageReady, we can set the Document window to display 2-Up, and use the **Optimize** palette in the same way. In the **Optimize** palette, use a Preset which will set up all the options in the palette accordingly, or choose a format such as JPEG and adjust the settings manually. If you set the format GIF, you can reduce the number of colours used (and therefore the file size) in the **Color Table** settings. If you select JPEG, you can similarly reset the JPEG Quality. When you've set and previewed the optimised settings, and are happy with them, select **File > Save Optimized**.

Applying colour trapping

Sometimes colours print incorrectly so they're not lined up properly; colour 'trapping' creates a slight overlap to accommodate for this. Ask your printer whether this should be set for your job and, if so, convert your image to CMYK and select **Image > Trap**. Enter the pixels as your printer advised.

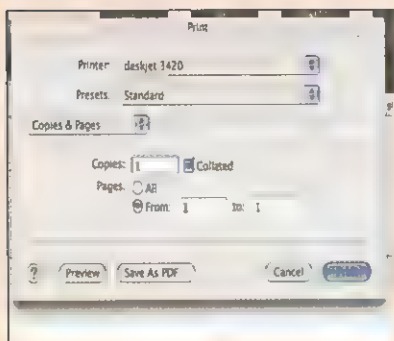
Create multi-page PDFs



You can compile a series of Photoshop images together, so that they make up a PDF consisting of multiple pages, like a book. Go to **File > Automate > PDF Presentation** and select **Save as: Multi-Page Document**. Then click **Browse** to create a list of files that will appear in consecutive pages of the presentation. Also tick **View PDF** after Saving to see the result once it's done. The next window will also ask for the usual PDF settings, including **Image Quality**. Make sure that this setting is sensitive to your target audience's download speeds if you're distributing your images online, as PDFs, especially when they contain detailed information such as photographs, can become very large.

Shortcut for quick printing

You may already know the keyboard shortcut for File > Print. It's [Control]+[P], or [Command]+[P] on a Mac; this will start running through your printing dialogue boxes. And, if you didn't know this tip before, you'll soon find yourself using it every day.



Colours for framing

If you're using mount board or card to create a margin frame around an artwork, be careful about the colour you use. It's not always advisable to use a contrasting colour, but this sometimes works very effectively, for example a white frame on a black image. Also, consider the colour of the frame itself.

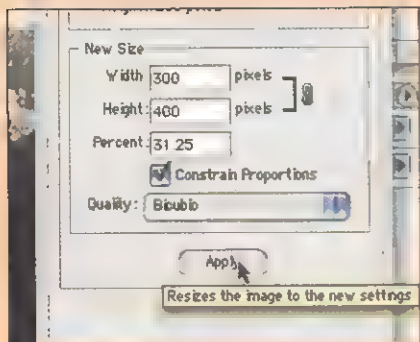


Slices in Photoshop and ImageReady

You can separate images into Slices using Photoshop or ImageReady. In Photoshop do View > Show > Slices to see if any have already been applied, and/or use the two Slice Tools in the toolbar (an icon like a scalpel) to create slices. However, as a web-directed application, ImageReady is better suited to creating and editing slices.

Use small JPEGs as copyright security for print work

If you're producing artwork or photography for a client that you don't know well, you may wish to give them an idea of your work without



Send reduced-size JPEGs to give clients a taster of your artwork

giving them the opportunity to steal the attached images and use them without paying. Of course, most clients would not be so unscrupulous, but when images are shared via email and the web, it can quickly become difficult to keep track of who's got what. So, rather than sending the full-size, high-res image, reduce the Image Size (this also makes it easier to see online) and email it as a small JPEG – if the work is for print, this will show the client what the image looks like, but won't be good enough quality for printing. If you want to be diplomatic, confirm that you have the image in hi-res format, but say you sent it as a JPEG for 'ease of access'!



Add an Alt tag

Alt tags are pieces of text information that are attached to web images, and show up if the image won't display for any reason – perhaps the viewer is using a screen reader to view the web, or has turned off images. In ImageReady select Window > Slice to open the Slice palette, then enter text in the Alt field there.

Print with Preview

The Print Preview options are many, but a few of them are genuinely useful



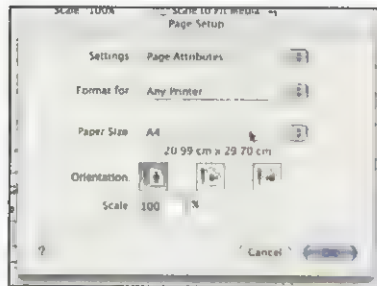
Add a description to your prints

Do **File > Print with Preview** and, in the dialogue, change **Color Management** to **Output**. Tick **Description** and, if your file contains one, this will be added to the print-out. To check this, first right-click (Control-click on a Mac) an image in the **File Browser**, selecting **File Info**. Select **Description** in the list on the left, type a **Description** in the field and print the image.

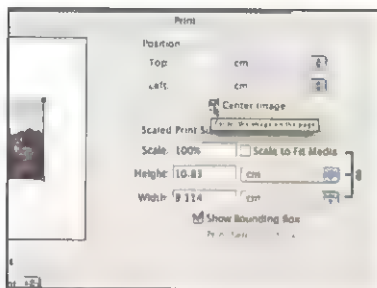


Share your presets too

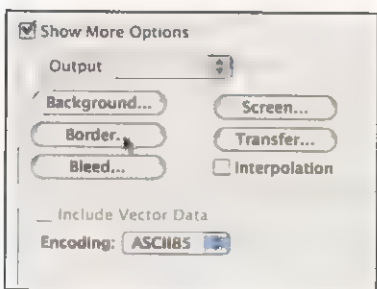
Working with Photoshop potentially makes you part of a huge online community – so as well as sharing your latest artwork or photography with people, also show people the **Brush** or **Style** presets you've created. These can be shared via email or web pages among Photoshop users who can install them if they choose.



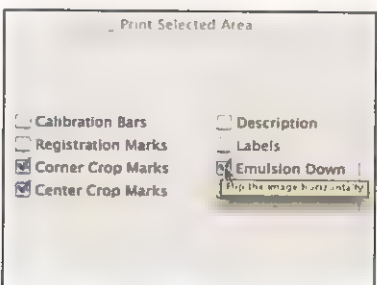
Open an image, check its resolution is 300 pixels/inch and select **File > Print with Preview**. In the dialogue, first click **Page Setup**, as many of the other settings and dimensions respond to the size of your paper. You'll probably want to set the **Paper Size** as **A4**. Also make sure that the **Orientation** is correct, depending on whether your image is landscape or portrait.



To reposition the image on the page, untick **Center Image** and then grab and drag in the preview. If the image is larger than the printable page area, tick **Scale to Fit Media**, then scale it down further if necessary. If the image is smaller, don't tick **Scale to Fit** – the scaled-up image will lose quality.



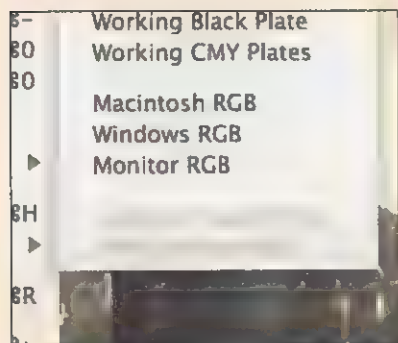
Don't worry too much about **Color Management** – if you're printing on a home printer, most will happily convert even RGB files into decent CMYKs. Change **Color Management** to **Output**. Add a coloured background (not if you're low on ink though!) if you want, and a border.



Add a **bleed** if the image is going to be cropped where the design runs off an edge. Of the remaining tick-boxes, you'll probably find **Corner** and **Center Crop Marks** most useful, for cropping. Finally, if you're printing on to a transfer which will be reversed, tick **Emulsion Down**.

Proof colours for different systems

Do **View > Proof Setup** and choose **Macintosh RGB** or **Windows RGB** to show how colours will appear on these varying systems. There may not be a huge difference, but it's worth checking to avoid any nasty surprises cropping up when you think you've finished your job.



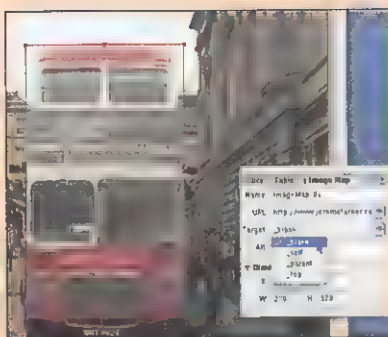
Create a soft-edged image for the web using feathering

If you're creating an image for display on a website, you may want to soften the edges so that it blends into the page more effectively. First, select the Rectangular Marquee Tool, set Feather to around 50 pixels and select the whole image. Then copy and paste the feathered image, and place the image into its own layer. Hide the bottom, original layer and select **File > Save for Web**. Choose either JPEG or GIF as the file type in the dialogue, but where it says Matte, choose Eyedropper Color and then, on the far left of the window, click the colour thumbnail to set it. See how this affects the optimised image?

View two different proofs of one image

First open your image, and select **Window > Arrange > New Window For...** so you have the two versions side-by-side. Select one window and do **View > Proof Setup > Working CMYK**, then check **View > Proof Colors** is ticked. Repeat this process with the other window selected, but choose an RGB set-up instead, to show the difference between RGB and CMYK colouring.

Create a clickable 'image map'



Open an image in ImageReady and identify a part that you want to be 'clickable'. Select one of the three Image Map Tools from the Toolbar – Rectangle, Circle or Polygon – and use it to draw a shape on the image. **Do Window > Image Map** to open that palette. In the URL field, enter the address of the page the map will navigate to. Leave the Target field untouched or enter **_blank** to open the link in a new window. Then do **Save Optimized As** and **Format > Images and HTML**. Open the HTML page in your browser; you must place both files together online for the image map to work.



ImageReady remembers links

If you enter a web address into an ImageReady field (for example, on the Image Map or Slices palettes), this is remembered for later use.

So, if you want to use the same URL for a button, slice or image map again, you can just pick it from the relevant URL menu.



Post large files

Sending large image attachments is all well and good if you've got a broadband connection, but useless if your recipient's inbox is then blocked by your bandwidth-crunching 6MB file. First, check how big files can be – some systems even use a firewall to block large emails. If emailing the file is going to be a problem, post it on a disc instead.

On your CD-ROM

Here's how to get the most from the disc that accompanies your Focus Guide

Featured resources

- Photo Illuminator 1.53 Full program
- 20 Essential Photoshop Images
- Exciting Photoshop video lessons
- Mark a lot of Awesome Photo Tips & Tricks
- Digital Photography Back sample chapters
- Selected Focus Guide from 1.000

To access the wealth of resources and software on your disc, including the full version of Photo Illuminator 1.53, first insert the CD into your drive. Whether you're using a Mac or a Windows PC, the disc will work equally well. If the disc interface doesn't run automatically, look at the facing page to find out how to start your installation manually.

Before you go on

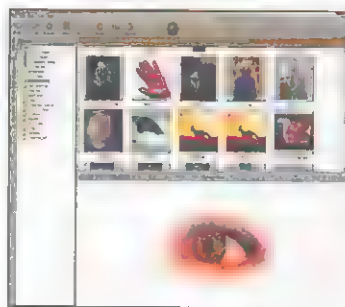
The first item that should appear on your screen is the disclaimer

window; here you'll need to click on 'I Accept'. Please remember that this disc has been scanned and tested at all stages of production, but – as with all new software – we still recommend that you run a virus checker before use. We also recommend you have an up-to-date backup of your hard disk before using this disc. Future Publishing does not accept responsibility for any disruption, damage and/or loss to your data or computer system that may occur while using this disc, or the data and programs on it. Please

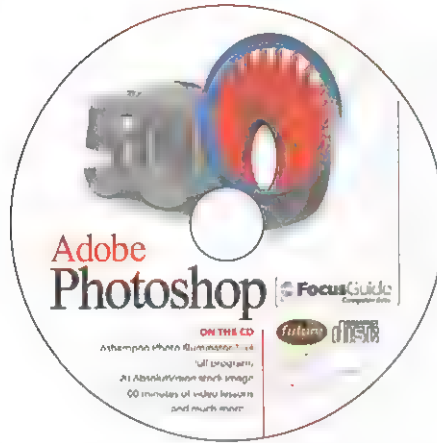
PHOTO ILLUMINATOR 1.53 FULL PRODUCT

Manage your media collection and more with ease

Previously worth \$49.99, this unrestricted version of the world's brightest image viewer and media manager is an ideal companion to Photoshop. You can send images via email directly from within the program, scan and manage your hard drives for images, videos, music, and documents, and turn your favourite photos and graphics into Windows screensavers, complete with music and high-quality transitions. After trying Photo Illuminator out you may wish to upgrade to version 2, with all its added features. A demo is available on the CD, along with information on how Adobe Photoshop Focus Guide readers can obtain a special discount.



View and manage your media files with Photo Illuminator – it's the perfect companion for Photoshop



consult your network administrator before attempting to install any software on a networked PC.

Installation

Once your CD interface has loaded, you can access any of the files, software and other resources included directly from your CD. Simply click on the animated 'Click' link and choose the section that you're interested in from the menu. The video tutorials require the latest QuickTime Player, from www.apple.com/quicktime/download.

If you have a query about your disc, email our support team at support@futurenet.co.uk for help. If you want to talk to a member of the team, call 01225 822743. Note that we can only provide basic advice on using the disc interface and installing the supplied software. We cannot give in-depth help on specific programs, or on your particular system configuration.



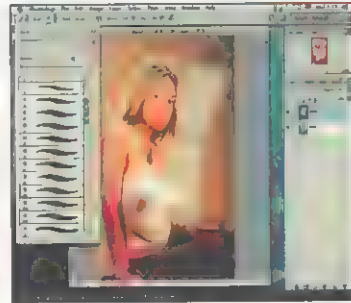
Starting your installation manually

PC users: click on the Windows Start button and click Run. Then click Browse and go to the CD directory in My Computer. Look for a file called PFGi.exe and double-click it. Then click OK in the Run dialogue, and the CD should then load up.
Mac users: Double-click the disc icon, then double-click StartMAC or StartOSX, depending on which OS you're using.

MARK MONCIARDINI'S PHOTOSHOP CS VIDEO TIPS

Enhance your images with tips from a Photoshop expert

Mark Monciardini has been a Photoshop designer for over 15 years and started out on Photoshop 2.01. His clients include industry-leading companies such as America Online, IBM, Pepsi-Cola Bottling Co and Sony Comp Entertainment. Mark has also found the time to release a number of video training products, the latter being Mark's 101 Totally Awesome Photo Tips in Photoshop CS. On the CD you'll find a selection of these tips, covering ways of modifying, enhancing and generally improving your photos. To view the video tutorials you'll require QuickTime, which you can download from www.quicktime.com/download.



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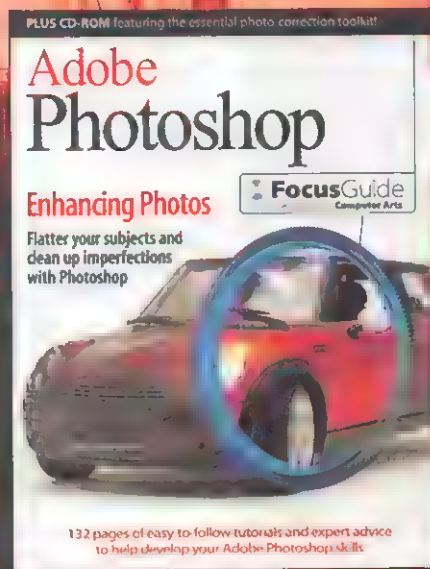
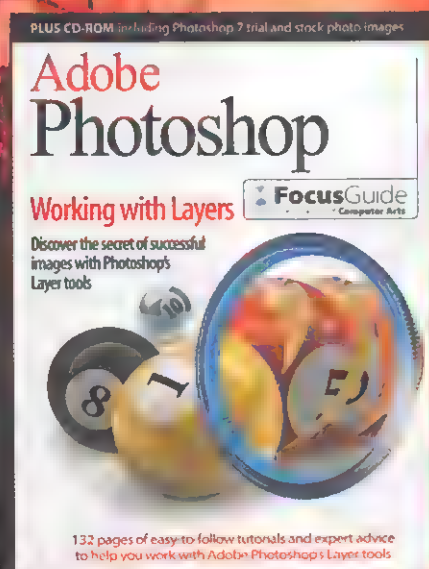
Swiss company AbsolutVision is home to photographers, graphic designers and professional lithographers. It was created to enable customers to download inexpensive, professional-quality, royalty-free photos. AbsolutVision is the first JPEG2000 photo library, and they're providing you with 20 free images for you to use in your own creative projects.



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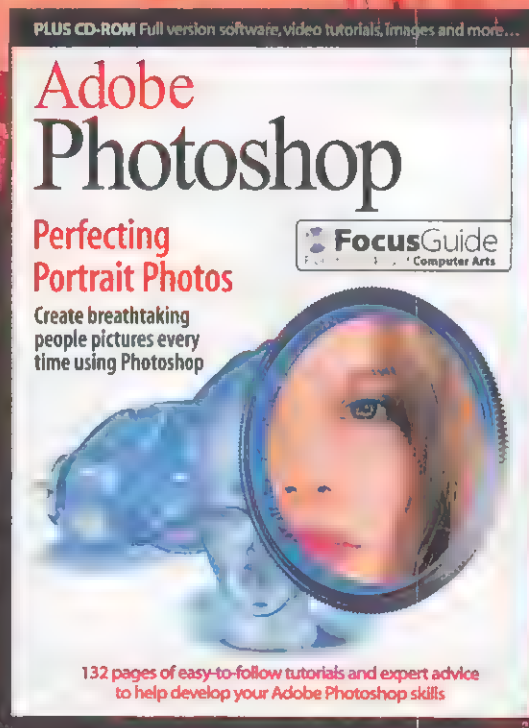
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ISSUE 15 ONSALE 23 SEPTEMBER

Glossary

We always try to cut out the jargon, but it helps to add a few words of Photoshop-speak to your vocabulary...

Anti-aliasing

Moving pixels around can cause undesirable jagged edges to appear, where edited pixels have not blended smoothly together. Anti-aliasing refers to the process of smoothing out these jagged edges for a more natural look.

Blending modes

Blending modes are used to determine how the pixels in a layer are blended with underlying pixels on other layers. By applying specific blending modes to individual layers, you can create a wide variety of effects.

Brushes

Brushes enable you to paint on Photoshop images with colour, other bits of images and predefined patterns. They mimic real brushes in that you can alter their size, hardness and texture in order to achieve the effect you want.

Calibration

The process of adjusting a device to bring its behaviour into line with a known specification, helping to reproduce colours accurately. For example, colour monitors are calibrated to a specific colour temperature, gamma, and black and white luminance.

Colour channels

There are three or more colour channels in all full-colour images, depending on which colour mode you're using. For example, RGB mode contains red, green and blue channels, while CMYK mode contains cyan, magenta, yellow and black channels. Photoshop enables you to alter each channel independently.

Filters

A filter is a preset tool within Photoshop, which applies an effect to an image (or a selection within the image). Some filters apply their effect in one click, while others offer more complex settings. Filter categories include Sharpen, Blur, Artistic and Stylize. Each of these offer further options via fly-out menus. For a complete list, click in the Filter menu.

Gamut

The range of colour that a device (such as a printer) can produce, or the range of colour that a colour model can represent. If a colour is said to be 'out of gamut', it will not be reproduced accurately by the printing process or other intended destination.

.GIF (or .gif)

A type of image file format best suited to producing simple images for the web. Examples include logos, banners, buttons and anything made up of only a few flat colours.

Greyscale

An image is greyscale if it contains no colour information. Using Photoshop you can transform a colour image into black and white, with many gradations of grey, in a single channel. This is known as a greyscale image.

.JPG (or .jpeg)

A type of image file format that gives a desirable combination of small file size and good-quality photo reproduction. It's commonly used in digital cameras to store the images that you take. The small file sizes also make it ideal for the web.

Layers

Layers containing effects or elements of images can be stacked on top of the original image layer (the background) in order to change the appearance of the image. Layers do not directly affect the layers beneath them, just as a blurry piece of glass placed over a photograph does not actually affect the photograph; in both cases, it's the appearance that has been changed, with the original image left unaltered.

Marquee

The flashing dotted outline that surrounds a selection. You'll also see it referred to in some places as 'marching ants'.

Rasterize

When you 'rasterize' a graphical element, you convert it from a vector to a pixel-based image. It will no longer be scalable like a vector, but can still be edited, like other images in Photoshop.

Resolution

A measure of how many pixels make up an image. A resolution of 300dpi (dots per inch) is recognised as the minimum if you're intending to print your images. 72dpi is sufficient for images intended for the web.

Selection

Any part of an image which you select with Photoshop's tools, usually indicated by a marquee around it. Making selections enables you to work on parts of an image, or remove them, without affecting the rest of the image.

Thumbnail

A small, 'thumbnail-sized' version of an image. You'll find

them in folders of images and in Photoshop's File Browser. Because they're smaller than a full-size image they're fast to load, and you can browse through them more quickly, which makes finding the file you're after much easier.

Pixel

An abbreviation for 'picture element', it's essentially a tiny dot of colour on screen. Most images are made up of millions of pixels, which combine to make an image look seamless. Zoom-in very close to an image, however, or enlarge it to a high degree, and you can clearly see these individual pixels.

PSD

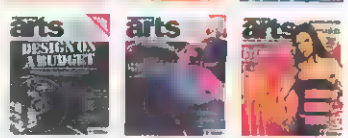
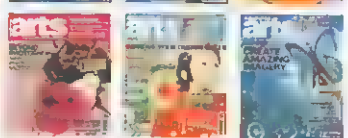
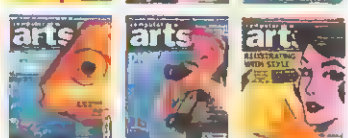
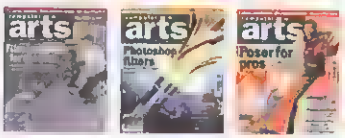
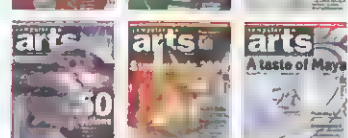
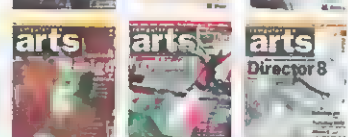
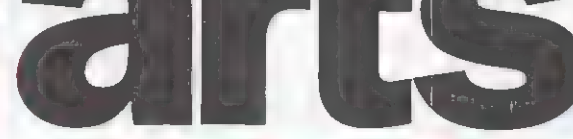
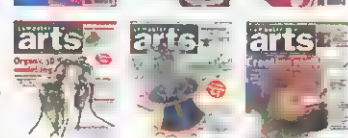
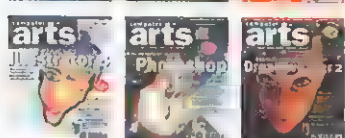
Photoshop's own file format, which preserves elements such as layers and channels. If you're editing an image file, it's sensible to save it as a PSD, in order for the changes you've made to remain editable when you next open it.

Spot colour

A method of specifying and printing colours in which each colour is printed with its own separate ink. In contrast, process colour printing uses four inks (cyan, magenta, yellow and black) to produce all other colours.

Tool options bar

When a tool is selected, the corresponding tool options bar automatically appears along the top of the Photoshop window, giving you access to various options relating specifically to that tool. These often include effects such as Anti-aliasing and Feathering.



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